

THE NATIONAL PROVISIONER

OFFICIAL ORGAN OF THE AMERICAN MEAT PACKERS' ASSOCIATION

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CANNOT LIMIT CEREAL IN SAUSAGE Federal Court Rules That Product Must Be Passed

The United States Circuit Court of Appeals has decided in favor of the packers in their contention that the government has no right to limit the amount of cereal or water in sausage. This decision was handed down this week at St. Paul, Minn., after the court had the case under advisement for several months.

The court rules that sausage with cereal is a wholesome product, and that the cereal is not an adulteration. Therefore, the government cannot bar more than a small amount, as the regulation now provides. So long as sausage makers state the ingredients on their labels, they cannot be limited to 2 per cent. of cereal and 3 per cent. of water.

When the government regulation was announced a year ago a test case was brought at St. Louis by the St. Louis Independent Packing Company, to determine the right of the government to compel sausage makers to limit the amount of cereal and water in sausage. The lower court decided in favor of the government. An appeal was taken, and now the higher court rules that the regulation is not reasonable.

The higher court remands the case to the Federal district court, and directs that court to issue an injunction restraining the chief meat inspector in charge of the plaintiff's plant from refusing to mark complainant's product upon the ground that it contains cereal in excess of 2 per cent. or water in excess of 3 per cent., so long as it is marked "Cereal added" or "Sausage and cereal," as now or hereafter required by the regulations. And if the Secretary of Agriculture shall hereafter require the product to be marked "Water added," or to state the amount of water added, the preliminary decree shall be modified accordingly.

This is a distinct vindication of the claim of packers and sausage makers that their product is neither unwholesome nor an adulteration when cereal and water are used in the formula in excess of the very small amounts which the government attempted to impose in the regulation which has now been nullified.

History of the Litigation.

The decision is the most important which has arisen since the meat inspection law went into effect. More than a year ago the De-

partment of Agriculture issued a regulation restricting the amount of cereal and water that could be used in certain classes of sausage to what the packers considered an extremely small quantity. Hearings were held before both Secretary Wilson and Secretary Houston of the Department of Agriculture, in which the packers' contentions were fully set forth. Both of these secretaries insisted upon making the restriction.

The packers claimed that the government had no legal right to specify the composition of ingredients in a food product, each of which was admittedly wholesome, and that it could not make arbitrary formulas where the admixture resulted in a wholesome food product. It was evidently the contention of the government that the additional cereal in sausage was intended only for the purpose of adulterating, and that by the use of cereals an unduly large quantity of water was possible.

The packers declared this was not true, because the water used was not added either to the cost nor the selling price of the sausage, and that sausage of this class formed a more attractive article of food to many people than one composed exclusively of pork.

The government insisted that sausage containing cereal was misbranded when more than a certain per cent. was used, and that therefore it had a right to make the restrictions which were issued by the Secretary of Agriculture. The packers denied that an article of food which had been manufactured practically for centuries in the same form, and which had been sold always as sausage, could not be considered misbranded when the ingredients were wholesome, and when the purchaser bought a certain class of sausage by preference because of the formula used. It was also contended by the packers that if the addition of cereal were an actual adulteration which in any way deterred the value of the finished food product, the purchaser or consumer would not demand such a class of sausage and that therefore there would be no commercial reason for manufacturing such a product.

The lower court at St. Louis decided in favor of the government and against the packers. Appeal was taken, briefs were filed,

and the result is that the lower court has been reversed and the authority of the Secretary of Agriculture to issue such a regulation is denied.

MEAT INSPECTION CHANGES.

Recent changes in the federal meat inspection service are reported as follows:

Meat inspection inaugurated: Metropolitan Hotel Supply Company, 875 Washington street, New York, N. Y.; Frye & Co., Thirteenth and Hoyt streets, Portland, Ore. Inspection extended to include W. H. Bristol, Lewiston, Idaho; D. Winant (Inc.), 178 Front street, New York, N. Y.; Hoover & Denham, 929-931 D street N. W., Washington, D. C.; Arthur E. Dorr & Co. (Inc.), 2 North street, Boston, Mass.; Missouri Valley Packing Company, 50 North Second street, Kansas City, Kans.

Meat inspection discontinued: Albert Lea Packing Company, Albert Lea, Minn.; The Southern Cotton Oil Company and Edible Products Company, Savannah, Ga.; D. M. Bodine, Trenton, N. J.; The Misses Gregory, Newark, N. J.; Forest Home, Purcellville, Va.; West End Packing Company, St. Louis, Mo.

CLEANING HOG PRODUCTS.

The federal meat inspection service is insistent upon the strict enforcement of its requirements concerning the cleaning of hogs' heads, feet and other products. The latest notice to inspectors says: "The attention of inspectors in charge is earnestly directed to various notices appearing in Service Announcements dealing with the cleaning of hog products. It is very necessary that these instructions be carefully and fully complied with and that no products be permitted to leave an establishment in an unclean condition. Inspectors in charge are directed to report any failure on the part of individual inspectors to comply fully with these instructions."

MARKING WRAPPED MEATS.

Federal meat inspection authorities call attention to the fact that the instructions issued in January of this year concerning the marking of wrapped meats are intended to apply to all meats wrapped in burlap or other cloth covering to which trade labels are not ordinarily affixed.

Do you read the "Practical Points for the Trade" page every week?

THE EVOLUTION OF DRY SAUSAGE

An Inexpensive Delicacy for All Classes

By Gilbert L. Lock, Dry Sausage Department, Armour & Company.*

Dry or summer sausage is not a new food product. It has been known and appreciated by Europeans for centuries—long before the age of ice-boxes and refrigerators. According to some authorities the word is derived from, and signifies "sauce" or "appetizer." If the literal definition of sauce is adhered to, you will readily see the connection—sauce is "any preparation, usually, liquid, or 'soft,' and consisting of several ingredients."

However, the word sausage evidently owes its origin to older and obsolete ways of spelling such as *sausige* (middle English); *sausiche* (old French); *salsiccia* (Italian), and is derived from the Latin word *Salsicia*, neuter plural of *salsicius* (prepared by salting), formed on *salsus*—salted.

Salami and sausage are synonymous—*salamme* (singular) *salamini* (plural) being an Italian word representing popularly the Latin *salamen* formed on *salare* to salt.

Sausage in the Old Days.

At the little farm, where the pig killing was an event of some consequence, economy was the practice of the occupants, so that everything must be utilized—nothing wasted. The feet were vinegar-pickled, the lard rendered, the hams, shoulders and side meat salted down for future use.

But what of the trimmings from the hams and the shoulders and from the side meat? This is where "necessity, the mother of invention," stepped in and solved the problem by evolving the dry sausage (with its delicious seasoning) that would keep, after being air-dried, until the next pig killing event, if necessary.

In those days the housewife, and later, the sausage-maker, was obliged to work under difficulties, washing and preparing the casings at a nearby stream, chopping the meat with an ordinary butcher knife, and mixing the materials by hand, a process that was likely to heat the product, often causing a strong and objectionable flavor.

In stuffing, the slow and unscientific method of using a tin funnel was employed, so it was uncertain whether the finished article would always be a success or not. Gradually, however, the sausage-makers showed signs of improved methods, and the manufacture lost favor in the household.

The introduction of stuffing machines operated by hand displaced the tin funnel. Later came the rocker, also operated by hand, for cutting up the meat. But many are yet unfamiliar with the compressed air stuffer, or the patent machines used for mixing the material, and many other inventions of modern times.

Dry Sausage in America.

The manufacture of dry sausage in America started with the advent of the big packing plants and Armour & Company were among the pioneers, if not the first, to perceive the advantage of duplicating the European article, and making it a naturalized American food product.

Of course they had their little difficulties to contend with, especially in competing, at

first, with the local production in European countries. But this was to a great extent overcome by offering a bonus in the shape of gold pieces mixed in the meat. So apt were they in the manufacture, however, that foreign prejudice was soon overcome, and the export demand greatly exceeded that of the domestic trade.

Each community abroad had its own particular style, differing either in the kind of meat and casing used, or manner of chopping, as well as a difference in spicing, handling and twining with string. In Europe, one could obtain the sausage that was peculiar to his district, but here we have grouped together all the styles, as well as introduced new kinds that have struck the popular fancy, not only in this country but abroad as well.

As a rule this product is classified as German or Italian, although both comprise articles that originated in other countries. For instance, the German grades include the Swiss "Landjaeger" and the Scandinavian "Goteborg." Similarly the Italian grades include "Arles," "Lyons" and others that are of French origin. Without exception all German goods are smoked, and with one or two exceptions only, all Italian grades are unsmoked.

How Sausages Get Their Names.

Many sausages derive their name from their "birthplace" or the location where the style was first adopted. For example:

Milan—A city of Italy.

Arles—A town of France.

Goteborg—From Gottenburg in Sweden.

Mecklenberg—A state in Germany.

Alessandria—A city of Italy.

Holstein—A province of Germany.

Gothaer—From Gotha in Saxony.

Alpino—From the Alps.

Genoa—A city in Italy.

Lyons—A city in France.

Lombardia—From Lombardy in Italy.

Although in some instances the name is given for other reasons, such as:

Peperoni—From the peperoni used in its manufacture.

Frisses—From the curly nature of the casing.

Prosciutti—The Italian word for ham.

Lachsschinken—Means salmon-ham, named from its mica like appearance when cut.

Menage—A French word meaning household or domestic economy.

Chorizos—Spanish for link sausage.

And so it goes.

Not only do the styles differ, but also the chop—some are coarse, some medium, others fine and extra fine. Each style has its particular spicing and flavoring. A few have, in addition to the ground spice, whole peppers distributed through the meat; and others are delicately flavored with garlic. Whether it be the summer (Cervelat), the Salami, the Arles, the Milan or any of the other styles, if it has the "Star" tag attached, it is the best that can be produced.

Fine Points in Making of the Product.

In the making, there is the flavor, the texture and the appearance all to be considered, as well as the quality and keeping properties.

These must all be right to insure every grade being exactly the same, year after year.

The material used in the manufacture of this appetizing food product is the trimmings from the fresh ham, and bacon parts, with a small percentage of fresh beef—all trimmed and handled in a scrupulously clean and careful manner. The chopping, the stuffing and the mixing are other important factors in the process of manufacture; the rockers, stuffing and mixing machines, being operated by motive power.

Do not suppose for a moment that the care and attention ends after the goods leave the stuffing bench. At this point begins, as it were, another chapter. The transfer of the sausage to the smokehouse and later to the drying rooms—or to the drying rooms direct—is merely the beginning of the curing process, and in this, increasing vigilance is essential.

Hanging from the kitchen ceiling to cure may have answered in the past, but for the exacting demands of the present, the goods are hung in specially constructed rooms, with sufficient air space to allow a free circulation of air. Those who visit the warehouses are amazed at the vast space required in which to hang the goods during the process of curing.

It must not be forgotten that climatic conditions have to be contended with, so that "watchful waiting" is the only course open to the manufacturer.

The question is often asked why so much fancy cording is used on Italian sausage, which adds to the cost of production. The reason is that we follow the styles of the original point of manufacture, and it is a well known fact that all merchandise coming from Italy usually is very attractive and pleasing to the eye, such as the wicker work on olive-oil and wine bottles, fancy labels on macaroni boxes, etc., which undoubtedly add to the appearance of the goods, while adding but a little to the labor expended.

In these days of progress, it is creative work in the packinghouse that tells—tells from the trimming bench to the dinner table. To quote from an address delivered last January by Mr. J. E. O'Hern, to an assembly of sausage superintendents—"the skilled sausage maker is a man whose mind is ever alert working up some new ideas . . . one who is resourceful, who has some creative genius and constructive faculties."

As already mentioned, dry sausage was manufactured at first in the home for home consumption, and later by makers for local sale. Although used in those times in various ways it was by no means the staple article of later days, nor as generally used as now.

Dry Sausage Growing in Favor Among Americans.

The product has already appealed to the fancy of the American people, and by them is considered a popular staple. It is to be found in almost all meat markets, and many groceries. The reason is obvious, if one will just consider the advantages as stated hereunder.

It is easily handled—all solid, nutritious meat, containing no bone—therefore no waste—and, being practically free from moisture, goes further than many other food products.

Imagine the convenience it is to the housekeeper who knows its advantages for the home, the picnic, the dinner pail, and the children's lunch basket. The restaurants have long made a specialty of it, in serving with a few olives and celery, as an appetizer. Also in the camp, where ice-boxes are unknown, it is indispensable on account of its excellent keeping qualities as well as its nourishing essentials.

(Concluded on page 35.)

*Reprinted from "Armco," Armour & Co.'s Salesmen's Magazine.

ARGENTINA AS A SOURCE OF PORK PRODUCTS

British Interests Trying to Stimulate Hog Raising There

(Special Correspondence of The National Provisioner.)

London, Eng., May 22, 1914.

At the present day there is a great scarcity of bacon and hog products in Europe, more especially in the United Kingdom, which consumes larger quantities of these commodities per head of population than any other country in the world. This is attributable to several causes, among which are the continued scarcity of hogs in the United Kingdom, and the increasing demands for bacon and hog products in the United States.

A few years ago the United States exported very large quantities of bacon to the United Kingdom, but during late years this supply has fallen off to such an extent that it is likely before long that, instead of exporting, the United States will be importing pork products to supply their own needs. The reason is that the population of the United States is increasing more rapidly than the herds of swine, and as a consequence the products are required for home consumption.

Such general considerations are bound to direct the attention of other countries to the needs of the United Kingdom, and already supplies are being offered from Russia, Holland, Australia and even as far away as China, but these are wholly inadequate to supply the continuous and increasing demand.

Holland has, during the last year, increased its exports of bacon to the United Kingdom very greatly, and until recently there seemed every likelihood of a flourishing trade being done between Australasia and the United Kingdom. But this has been checked by the increase in the price of live pigs there to about 16c. per pound, which, judging from the exporters' point of view, is a prohibitive figure.

Hog-breeding countries, therefore, have now a splendid opportunity to step in and secure a lasting and profitable trade without any fear of opposition, and in this connection many are turning their attention to Argentina as being the most likely of hog-breeding countries, from which such supplies as are wanted in Europe may be expected.

Argentina is already celebrated as a meat exporting country. The exports, however, have been almost exclusively beef and mutton, and it is due to the fact that the exports in these articles have grown so rapidly that the hog has been, comparatively speaking, neglected.

It has been assumed also that even in bacon and pork products were produced in Argentina there would be some difficulty in carrying these to Europe, as the tradition hitherto has been that bacon especially would not carry in the refrigerator. That has been shown to be a fallacy, as it is quite possible and practical to carry bacon in cold storage at certain temperatures from any part of the world to the United Kingdom, and this has been demonstrated over and over again.

This, then, is a splendid opportunity for Argentina. And it so happens that during the present year there has been an increase of the corn production there, the actual figures showing that whereas the crop in 1913 was 4,806,951 tons, the figures for the present year are 8,300,000 tons.

Of course a large proportion of this corn

will be exported, but it is now apparent to the corn growers of Argentina that it would be equally easy, and a great deal more profitable, to sell their corn on the hoof, and so follow the example of the United States, where in the great corn belt many millions of pigs are fed on corn and nothing else.

But Argentina has another asset besides corn which, if properly utilized, will make the growing of hogs in that country more profitable than it can possibly be in any other. This asset is alfalfa, which, when once it has been planted, more especially in the central provinces of Argentina, grows for many years without any kind of attention, and it has merely to be cropped two or three times a year.

Alfalfa as an Asset in Argentina.

Alfalfa as a feed for young pigs cannot be beaten, and a mixture of corn and alfalfa for fattening animals is a complete ration.

The 1914

Meat Packers' Convention

will be held at

CHICAGO

October 19, 20 and 21

It's not a bit too early to begin to get ready

Save the Dates !

The means of hog production, therefore, on a very cheap basis are ready to the hands of Argentine estancieros, and there is every likelihood that as these simple facts become more widely known they will cause a great development to take place in Argentine swine husbandry.

At the present moment there are some two million hogs in Argentina, many of these being of a nondescript character, and it would be well for the farmers of that country if they would pay more attention to the breeds of hogs which are most suited for the production of English bacon, and which at the same time are easily acclimatized.

The breed which would seem to conform best to the requirements of the country is the Large Black, but unfortunately there are not many of these in Argentina at present. It would, however, be very easy to import pedigree stock of the Large Black breed from the United Kingdom and so improve the

native herds. It would not take very long to alter the character of the herds throughout the whole country, as the generation of a pig is about eight months, and as it is one of the most prolific of animals the return for money invested in pedigree stock is safe.

Bacon Curing in Argentina.

The natural corollary of swine husbandry in a country like Argentina is bacon curing, and it is of interest to know that at the present time bacon curing after the British method is being organized in the country. One or more factories will be at once put up in the central provinces, and in these bacon will be cured in the British manner, and the residual products will be handled in a scientific way, so that nothing will be lost. And it may therefore be anticipated that before long exports of bacon from Argentina on a considerable scale will commence.

It is understood that the government of Argentina is willing to lend every possible assistance to this new departure, and whatever technical knowledge is required to develop the business will be placed at the disposal of the organizers.

It is principally due to Mr. Quinton de Acevado Machado, Dr. Juan Sarghel, Dr. Elia, and some others with whom they are associated in Rosario de Santa Fe that this project has advanced thus far and is about to materialize in the manner indicated. These gentlemen have secured the services of Loudon M. Douglas, F.R.S.E., of Edinburgh, who has carried out many similar undertakings in different countries throughout the world, and who has recently been in Argentina with a view to seeing what the local conditions really are. It is his opinion that Argentina is an ideal country for swine husbandry, and if the government set about carrying out the propaganda so as to disseminate trustworthy information with regard to the breeding and feeding of swine, there can be little doubt that a bacon curing industry of considerable magnitude will very soon be established in the country.

APRIL OLEOMARGARINE OUTPUT.

Official government reports of the output of oleomargarine for the month of April, as shown by revenue stamp sales, indicate that the production for that month was 293,724 lbs. colored and 9,540,880 lbs. uncolored, or a total of 9,834,604 lbs. Official government figures, based on stamp sales, showing oleomargarine production in the United States for the past year, are as follows:

	Pounds.
April	14,238,134
May	11,595,865
June	8,197,874
July	7,945,414
August	9,210,708
September	13,187,317
October	15,181,114
November	14,378,296
December	15,120,490
January, 1914	13,602,038
February	13,182,040
March	12,310,554
April	9,834,604

FORTUNE IN SHEEP.

Mrs. Elizabeth Fennemort died at her home in Salt Lake City, Utah, at the age of 69. She went to Utah from Scotland in 1865 and engaged in the cattle and sheep business. She left an estate valued at over \$2,000,000.

PRACTICAL POINTS FOR THE TRADE

ACTUAL PACKINGHOUSE TESTS.

[EDITOR'S NOTE.—Every packinghouse superintendent keeps a record of tests, which is his most precious possession, and which serves him as a guide and reference in succeeding operations. It is only actual tests that tell the story in packinghouse practice; theory is all right, but practical results are a necessary guide always. The National Provisioner has printed on this page of "Practical Points for the Trade" many tests of this sort, in answering inquiries from subscribers. It has many more of these test results at its command, and will publish them from time to time for the general information of readers, instead of withholding them until some specific inquiry is made.]

FREEZING AND THAWING OUT MEATS.

In a recent issue The National Provisioner published an answer to a question concerning the thawing out of hams. In this answer some information was given concerning defrosting. A subscriber, who is a pork packer in Western Canada, writes that he was much interested in this item and that there has been a good deal of discussion on this point among their employees. He asks that we favor him with a full discussion of the subject of defrosting meats.

Meats that have been frozen for preservation under proper conditions should thaw out in as good a condition, practically in every respect, as when put into the cooler fresh. This means that meats intended for the freezer should be in prime condition when placed therein—properly chilled and absolutely fresh.

The outer surface of the meats should be dry; that is, of a regular "chilled" dryness, not air dried, and the animal heat positively eliminated from the extremest inner parts of the meats. When in this condition the quicker the freezing is effected the better, as it tends to preserve the bright, fresh color and appearance of the meats to an extent that is gratifying to the packer.

Ordinarily meats are placed in the freezer in a temperature of 6 to 10 degrees below zero, and held there at least 48 hours and up to 72 hours, when they may be removed to storage at 12 degrees above zero and there kept until required.

Small stuff—such as livers, hearts, tongues, brains, sweetbreads, kidney knobs, calves' heads and feet, oxtails, lamb fries, calf rennets, kidneys, etc.—after being properly chilled and prepared, are packed in boxes be-

fore being placed in the freezer, and thus shipped out of the freezer in refrigerator cars to distributors. All these articles are packed carefully and according to selling requirements as to weight, etc., if the best prices are to be obtained.

The defrosting of these meats should be effected so as to meet immediate sale for consumption; for instance, where retail butchers, hotel keepers, restaurateurs, etc., figure to take this stuff as required out of the packing or branch house having a freezer and defrosting room. We do not assume that this is done in every instance, but it should be done, especially if the meats are to be exposed on the counter for sale. Otherwise there will be a loss of color, and the meats will carry too much outside moisture, making the meats more or less unattractive, though otherwise they may be in perfect condition.

In a previous article we explained that in the absence of a defrosting room the thawing out should be effected slowly, the meats being spread on racks in a room with some air circulation and the temperature thereof of 45 to 48 degs. Fahr., but not over 50 degs. Fahr. In this manner the meats come out fairly satisfactory, but are liable to carry too much outside moisture, due to condensation. This may be removed to some extent by wiping with an absorbent cloth, such as several thicknesses of cheesecloth, as the meats are taken out to be sold over the counter.

The construction of a defrosting room entails some expense, but if quantities of meats are to be defrosted this is warranted. This room is equipped much the same as a chill room, with brine or ammonia pipes in a loft overhead, allowing hot and cold air ducts up and down the sides, so the hot air may go up over the refrigerating pipes on one side and the cold air down the other, making a continuous circulation.

The room proper is fitted with tables with galvanized iron tops, under which are steam pipes, the heat from which comes in contact with the table upon which the meats are placed, causing an exceptionally rapid circulation of air. The warm air rises, and is absorbed by the refrigerating pipes above and

the cold air descends, keeping up the circulation. The steam should be so regulated that the temperature of the room will be around 45 degs. Fahr.

Beef cuts can be defrosted in such a room in about ten hours, and will come out practically as attractive as when placed fresh in the freezer. Such is the principle; apply it as you wish. Frozen meats thawed out rapidly in too high a temperature will become slimy and prone to rapid decomposition.

There is a peculiarity about frozen hams and bellies, placed in the freezer fresh for future curing, that is not generally known. Frozen hams—or hams that have been frozen rather—will cure in 70 per cent. of the ordinary time required, and bellies in two days less per pound than the regular time required.

WHY YOU SHOULD KEEP A FILE.

In connection with the practical trade information published every week on page 18, The National Provisioner is frequently in receipt of letters from subscribers who recall having seen something interesting or important in a previous issue of this publication, but they have mislaid the copy and want the information repeated. The National Provisioner offers the suggestion that if every interested subscriber would keep a file of The National Provisioner he would be able to look up a reference at once on any matter which might come up, and thus avoid delay. A carefully arranged index of the important items appearing in our columns is published every six months, and with this and a binder, which The National Provisioner will furnish, the back numbers of the papers may be neatly kept and quickly referred to for information.

The binder is new, and is the handiest and most practical yet put on the market, and it costs less than the old binder, too! It is finished in vellum de luxe and leather, with gold lettering, and sells for \$1. It may be had upon application to The National Provisioner, 116 Nassau street, New York.

Do you read the "Practical Points for the Trade" page every week?

STANDARD FOR A GENERATION SWENSON EVAPORATORS

have been put into every industry where evaporators are used. They have become so well and so favorably known that for most of these industries today the Swenson is standard. Repeat orders have followed one another until now half of our business is based upon previous business with the same concerns. At the same time, where required, we will design and construct evaporators of any type to suit special conditions.

We have become the largest manufacturers of evaporators in the United States because we have gone at the thing from the right standpoint. Our staff of engineers includes men whose experience ranges over all industries using evaporators, and whose training has been along thoroughly scientific lines. Every evaporator we build is designed to fulfill certain specific conditions. It is designed with the background of this wealth of experience, and is based upon correct principles. Only

under such conditions could the business have been built up to our present dimensions.

The reason the big packers come back to us for more and more evaporators for tank water is because they have thoroughly tested out our product and found it satisfactory. The man whose plant is smaller does not always have opportunity to make these tests, but he can safely rely upon the example of the men of widest experience.

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CHICAGO

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GEORGE L. MCCARTHY, President.

HUBERT CILLIS, Vice-President.

JULIUS A. MAY, Treasurer.

OTTO V. SCHRENE, Secretary.

PAUL I. ALDRICH, Editor.

GENERAL OFFICES.

No. 116 Nassau St. (Morton Building), New York, N. Y.

Cable Address: "Sampan, New York."

Telephone, No. 5477 Beekman.

WESTERN OFFICES.

Chicago, Ill., 906 Postal Telegraph Building.
Telephone, Harrison 1553.

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DECISION IN SAUSAGE CASE

The decision of the United States Circuit Court of Appeals, sitting at St. Paul, Minn., in the famous "sausage case," in which the packers contended that the Department of Agriculture did not have authority to restrict the amount of cereal in sausage, is the most important decision since the meat inspection law went into effect. The court upholds the packers and denies the authority of the Department of Agriculture to issue such a regulation.

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The contention of the packers was that the government had no legal right to specify the composition of ingredients in a food product, each of which was admittedly wholesome, and that it could not make arbitrary formulas where the admixture resulted in a wholesome food product.

It was evidently the contention of the government that the additional cereal in sausage was intended only for the purpose of adulterating, and that by the use of cereals an unduly large quantity of water was possible. The packers met this contention with the statement that this was not true, because the water used did not add either to the cost or to the selling price of the sausage, and that sausage of this class formed a more attractive article of food to many people than one composed exclusively of pork.

The government maintained that sausage containing cereal was misbranded when more than a certain percentage was used, and that therefore it had a right to make the restrictions which were issued by the Secretary of Agriculture. The packers denied that an article of food which had been manufactured practically for centuries in the same form, and which had been sold always as sausage, could be considered misbranded when the ingredients were wholesome, and when the purchaser bought a certain class of sausage by preference because of the formula used.

It was also contended by the packers that if the addition of cereal were an actual adulteration, which in any way lessened the value of the finished food product, the purchaser or consumer would not demand such a class of sausage, and that therefore there would be no commercial reason for manufacturing such a product.

The lower court in the case, sitting at St. Louis, decided in favor of the government and against the packers, but the decision that was handed down was not as clear as it might have been, and the line of reasoning was obscure, even to attorneys. Appeal was taken, briefs were filed, and the result is that the lower court has been reversed and the authority of the Secretary of Agriculture to issue such a regulation is denied.

Just what the immediate effect of this decision will be cannot be stated at this time. Either modified regulations will have to be issued by the Department in accordance with the decision, or such other legal procedure must be taken as the case warrants.

A DISQUIETING TENDENCY

Reports from Washington, which the administration does not hesitate to make pub-

lic in spite of the comments upon the disastrous effect of its tariff policy which will undoubtedly follow, show that the United States is not only reducing its sales of foodstuffs abroad, but drawing more largely upon foreign countries for certain of its food requirements.

An analysis of the foreign trade during the first six months under the new tariff has been made by the Bureau of Foreign and Domestic Commerce, Department of Commerce. From this it is shown that imports of foodstuffs in their natural condition, including food animals, increased from \$117,194,237 in the half year ended with March, 1913, to \$143,421,536 in a like period ended with March, 1914; and that imports of foodstuffs partly or wholly prepared for use in the same period advanced from \$95,744,241 to \$100,967,378. Thus the increase in importations of all food products in the period named amounted to over \$30,000,000, or an average of \$5,000,000 per month.

On the export side the figures are even more striking. Of crude foodstuffs the sales to foreign countries fell off more than 50 per cent., while prepared foodstuffs also declined, though in smaller proportion. Exports of the first-named group fell from \$115,850,453 in the six months' period of last year to \$55,483,787 in the half year which ended with March of the current year, and manufactured food products from \$180,007,422 to \$162,022,620.

The articles of food showing the largest increases in importations during the six months under review are fresh beef, cattle, corn, wheat, rice, macaroni, fruits, molasses and edible oils. We imported during the six months which ended with March last 550,000 head of cattle, or more than double the number imported in the corresponding period a year earlier; 83 2/3 million pounds of beef and veal, or over 50 times as much as a year ago; nearly 9 million bushels of corn, or 30 times as much as in the corresponding six month of last year; 140 million pounds of rice and rice flour, or nearly 50 million pounds more than a year ago; and 66 million pounds of macaroni, vermicelli and other similar preparations, as against 53 million pounds in the corresponding six months of the preceding year.

While in many instances the above-mentioned food products form a small proportion of the domestic consumption, as in the case of corn, wheat and meats, the increase in imports in recent months has been so rapid as to give promise of reducing before long the shortage of our own food supply. This promise the government holds out as a compensation for the economic losses suffered by home producers and home industries. The manner of its fulfillment only the future can show us.

TRADE GLEANINGS

The Harris abattoir at Haileyburg, Canada, has been destroyed by fire.

The municipal abattoir at Beaumont, Tex., will shortly begin operations.

The city of Demopolis, Ala., will shortly commence the erection of a public abattoir.

C. C. Epps will install a five 80-saw gin and one press expeller mill at Bristow, Okla.

Armour & Company's new branch house at Meriden, Conn., was opened to the public last week.

The Fullerton Beef Packing Company, Patterson, N. J., will erect an \$8,000 addition to its plant.

The National Stock Yards at Atlanta, Ga., have been damaged by fire to the extent of \$150,000.

Clement Allen is having plans prepared for the rebuilding of his pork packing plant at Medea, Pa.

The Bolds Lin Stock Company, Plaquemine, La., has been incorporated with a capital stock of \$15,000.

The Etewan Fertilizer Company, Charleston, S. C., has increased its capital stock from \$125,000 to \$550,000.

The Walkers' Cotton Oil and Refining Company has increased its capital stock from \$150,000 to \$210,000.

A. R. Stevens & Brother, Tampa, Fla., will establish a plant at Orlando to manufacture packing house equipment.

The Wilmington Fabric Leather Company, Wilmington, Del., is reported as to erect a branch plant at Hagerstown, Md.

It is reported that a packing company at Fort Worth, Tex., is contemplating erecting a packing plant at Brownwood, Tex.

The Farmers' Gin and Fertilizer Company, Blythe, Ga., has been incorporated with a capital stock of \$5,000 by W. E. Norrell and others.

The Delta Cattle Company, Groveton, Tex., has been incorporated with a capital stock of \$50,000 by R. C. Delafosa, L. P. Atmar and others.

The Pan-American Soap Company, Knoxville, Tenn., has been incorporated with a capital stock of \$30,000 by K. R. Schmidt, of Knoxville, and others.

The Delta Cotton Oil Company, Jackson, Miss., has been organized with S. H. Sample, of Shreveport, La., as president. A 50 x 200-foot mill will be erected.

The Philadelphia Fertilizer Company, Riverton, Pa., has been incorporated, with a capital stock of \$100,000, by J. Van Herwarden, Riverton, and Carl Miller, Philadelphia.

Crawford Johnson has purchased the oil mill at 10th avenue and 40th street, E. Birmingham, Ala., and will increase its capacity. Has also purchased seed houses at Clanton, Oneonta, Sylacauga, Bessemer and other cities.

F. A. S. Price, chairman of the Farmers' Cooperative Packing Company of La Crosse, Wis., has purchased the plant of the Langdon & Boyd Packing Company for \$123,000. It is the intention of the new owners to add a cold storage plant.

Plans have been inaugurated for the construction by the Henry Burkhardt Packing Company of a two-story iron and concrete building on South Market street near Jefferson, Dayton, O., at a cost of \$10,000. This building will be pushed to completion within the next two months.

CATTLE COST MORE AND HOGS LESS.

The average prices paid for hogs and sheep on April 15, 1914, were somewhat lower than the average prices paid for these meat animals on April 15, 1913, according to figures prepared by the Bureau of Statistics, U. S. Department of Agriculture. At the same time, however, the farm price for beef cattle had advanced from \$6.08 a hundred, on April 15 a year ago, to \$6.29 a hundred, an increase of 21c., or over 3 per cent.

An advance in the price of beef cattle is shown for nearly every State. In Michigan, Iowa, Missouri and Kansas the price was the same as a year ago, and in Wisconsin 30 cents per 100 pounds less. The variation in State averages of prices of beef cattle is greater than of hogs. The lowest State averages last month were \$4.30 in Alabama, \$4.40 in Mississippi, and \$4.50 in Georgia; and the highest were \$8.50 in Rhode Island, \$7.60

in New Hampshire, and \$7.50 in New Jersey. It appears, therefore, that prices are highest in New England and lowest in the Southern States.

An average of \$7.40 is recorded for Pennsylvania and Iowa, \$7.20 for Maryland, \$7.10 for Ohio and Kansas, \$7.00 for Maine, Indiana, Illinois and Nebraska, \$6.90 for Massachusetts, Missouri, Wyoming, Colorado, \$6.80 for Nevada, Washington and California, \$6.70 for Oregon, \$6.60 for Connecticut, West Virginia and South Dakota, \$6.50 for New Mexico and Idaho, \$6.40 for Delaware, Michigan and Kentucky, \$6.30 for Virginia and Montana, \$6.20 for Arizona, \$6.10 for Oklahoma and Utah, and \$6.00 for Minnesota. In States not mentioned the price averaged below \$6.00.

The average farm price for veal calves on April 15 is estimated at \$7.68 a hundred, as compared with \$7.38 on April 15, 1913, an increase of 30c. a hundred, or about 4 per cent. The average farm price for veal calves of \$7.68 for April 15, 1914, compares with a price of \$5.96 in 1911, and \$6.22 in 1912 on the same date.

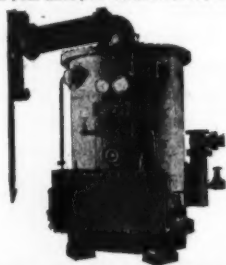
The average price per 100 pounds paid to producers of hogs in the United States was \$7.80 on April 15, which is 14 cents per 100 less than on April 15 last year. The decline was 30 to 40 cents per 100 in all the important hog-producing States, from Ohio to Kansas, but in some of the New England States and practically all of the Southern States, excepting Texas and Oklahoma, prices ruled higher than a year ago.

The lowest State average price is \$6.10 per 100 pounds in Florida, and the highest State average is \$9.60 in Rhode Island and Connecticut. The average was \$8.40 in Indiana, \$8.30 in Ohio, \$8.10 in Maryland, Illinois, Michigan, and Iowa, \$8.00 in New York, West Virginia, North Carolina, Wisconsin and California, \$7.90 in Maine, Vermont, Virginia, Nebraska, Kansas and New Mexico, and \$7.80 in South Carolina, Georgia, Minnesota, Missouri, Kentucky and Washington. In all other States the average price is above \$8.40 or below \$7.80.

The estimates showed the average farm price per hundred for sheep on April 15, 1914, to be \$4.96, as compared with \$5.16 on April 15, 1913, a decrease of 20c., or about 3.9 per cent. The 1914 price of \$4.96 for sheep compares with a price of \$4.55 in 1911, and \$4.57 in 1912, on the same date.

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FOR PURCHASING DEPARTMENTS

YORK REFRIGERATING SALES.

Since its last report of April 21 the York Manufacturing Company, York, Pa., has made the following installations of refrigerating and ice-making machinery:

Fostoria Creamery Company, Fostoria, Iowa; one 2-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

H. Janssen & Co., San Francisco, Cal.; one half-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Cheyenne Creamery Company, Cheyenne, Wyo.; one 6-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Columbus Cash Market, Columbus, Mont.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Beatrice Creamery Company, Denver, Col.; one 6-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

T. M. Gilchrist, Beaver Falls, Pa.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Theo. W. Mertens Ice and Coal Company, Kansas City, Mo.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

G. Schlagel, Lakeview, Ore.; one 8-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

H. Viedt, Morristown, N. J.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

L. C. Ross, Bakersfield, Cal.; one half-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

A. M. Shoemaker Company, Pittsburgh, Pa.; one 2-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

J. M. Pyle, Burgettstown, Pa.; one 3-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Windsor Machine Company, Windsor, Vt.; one 6-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete, also a quarter-ton freezing system.

Confluence Cold Storage Company, Confluence, Pa.; two 20-ton vertical single-acting refrigerating machines, direct connected to Corliss engines, and condensing side complete, including two flooded atmospheric ammonia condensers, also a 10-ton flooded freezing and distilling system and a 100 h. p. horizontal return tubular boiler system complete.

Inter-State Serum Laboratories Company, Kansas City, Mo.; one 2-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Arkansas Valley Fruit and Produce Company, Wichita, Kan.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Oscar Adler, Fort Wayne, Ind.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Albert Brothers, Trenton, N. J.; one 35-ton vertical single-acting refrigerating machine, direct connected to Corliss engine, and condensing side complete, including one flooded atmospheric ammonia condenser, also an 18-ton flooded freezing system and a 15-ton distilling system.

Riverside Dairy, Riverside, Cal.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

John Folmer, Hanover, Pa.; one 11-ton vertical single-acting, belt-driven refrigerating machine, enclosed type, and high-pressure side complete; 7-ton raw water flooded freezing system, refrigerating system, also direct expansion piping for ice storage and ice cream hardening rooms.

C. E. Wank, Leipsic, Ohio; one 2-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Lake Mills Creamery Company, Lake Mills, Iowa; one 6-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

G. C. Mehlhose, Wyandotte, Mich.; one 8-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

E. E. Clark, Garrett, Ind.; one 8-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Kendall Ice Cream Company, Chicago, Ill.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Geo. H. Fosdick, Crawfordsville, Ind.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Commission Row, St. Paul, Minn.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Meiling Delicatessen, 317 West 4th street, Los Angeles, Cal.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Santa Ynez Creamery, Gavota, Cal.; one 1-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Wm. Judd, Avalon, Cal.; a 1-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Consumers' Hygienic Ice Company, Union Hill, N. J.; one 250-ton vertical single-acting refrigerating machine, direct connected to horizontal cross compound condensing Corliss engine and condensing side complete, including 20 flooded atmospheric ammonia condensers; one 125-ton flooded freezing system; one 150-ton distilling system.

The Crescent Ice and Coal Company, Philadelphia, Pa.; one 90-ton vertical single-acting, belt-driven refrigerating machine and condensing side complete, including 6 flooded atmospheric ammonia condensers, also one 60-ton raw water flooded freezing system and 1,000 feet of 2-inch direct expansion piping for ice storage room. The plant to be operated by one 300 h. p. Bruce-Macbeth gas engine, and all accessories for continuous operation, including one 300 h. p. Smith gas producer complete, also all necessary counter-shafting, pulleys and belting for operating the plant.

Holden Ice and Fuel Company, Holden, Mo.; one 35-ton vertical single-acting refrigerating machine, direct connected to Corliss engine and condensing side complete, including three flooded atmospheric ammonia condensers, a 15-ton flooded freezing system and a 15-ton distilling system.

C. S. Flickinger & Son, Shillington, Pa.; one 20-ton horizontal double-acting refrigerating machine, direct connected to Corliss engine and condensing side complete, including one flooded double-pipe ammonia condenser,

(Continued on page 41.)

TO KEEP MEATS AND ICEBOX SWEET.

With the approach of hot weather the meat dealer finds his difficulties increasing, especially as to the sanitary condition of his premises and stock. Conditions are all against him on a red-hot day, and he is driven almost to desperation in his effort to keep his shop and his icebox sweet and clean and keep his meats and poultry from spoiling. Aside from ordinary sanitary methods he is always on the lookout for something which will aid him in this respect.

Many preparations have been put out, but most of them have met with the opposition of the health and food authorities because it was claimed they were harmful to food products with which they came in contact. A preparation which its makers claim does not meet with this objection is Carn-o-line, which is not a food adulterant, and which, it is claimed, acts as a preservative by preventing foods from being contaminated by micro-organisms.

This preparation if used in the following manner: "Place four small cans in separate parts of the icebox and pour about four ounces of Carn-o-line in each can. That amount of Carn-o-line will draw out all of the foul gases in the icebox and thus bring about the result as stated. At the end of each week the cans should be emptied and refilled with a fresh solution. The walls of the icebox should be sprayed with Carn-o-line occasionally."

It is claimed that the loss usually resulting from trimming meats will be wiped out by the use of this preparation. It is also advertised as reducing the ice bill by reducing the amount of cooling required. The advantage is also claimed that it removes and prevents all odors of decomposition, and prevents slime and mold. It is made and marketed by the New York Laboratories Company, No. 257 Atlantic avenue, Brooklyn, N. Y.

MORE FRICK SALES.

Sales of Frick ice machinery, in addition to those reported last week by the Frick Company, Waynesboro, Pa., are as follows:

Calnen Ice Company, Richmond, Va., condensers and additions to freezing system.

Guy P. Sumpter, Dallas, Tex., compression system and water cooling outfit.

Tait-Nordmeyer Engineering Company, St. Louis, Mo., 15-ton Corliss driven H. D. A. compressor with additions to freezing system for St. Louis Hospital, St. Louis, Mo.

Hershey Creamery Company, Harrisburg, Pa., cold storage room piping for new ice cream plant.

United Iron Works, Oakland, Cal., 20-ton V. S. A. refrigerating machine and compression system for Taylor Ice Company, Santa Ana, Cal.

Parkersburg Ice and Coal Company, Parkersburg, W. Va., apparatus for flooded system. Morris Ice Company, Jackson, Miss., apparatus for flooded system.

J. Shalcross & Son, Coatesville, Pa., addition of 40-ton refrigerating machine.

Mollenberg-Betz Machine Company, Buffalo, N. Y., 10-ton V. S. A. machine with compression system and brine cooling system for G. H. & W. Downs Ale Brewery.

Northern Texas Traction Company, Fort Worth, Tex., ammonia condensers for Arlington, Tex.

Sherman Square Hotel, New York, N. Y., ammonia condensers.

ICE AND REFRIGERATION

NEW CORPORATIONS.

Tampa, Fla.—The Puritan Ice Company has been incorporated with a capital stock of \$60,000 by M. E. Gillett and others.

Springfield, Ill.—The Wishart Ice Machine Company has been incorporated with a capital stock of \$40,000 by J. O. Wishart and others.

Newark, N. Y.—The Wayne County Cold Storage and Ice Company has been incorporated with a capital stock of \$55,000 by G. W. Buffham and others.

ICE NOTES.

Monteagle, Tenn.—Kennedy Brothers will rebuild their ice plant recently burned.

Oriental, Tex.—The Oriental Oil Company, Dallas, Tex., has let a contract for a 10-ton ice machine.

Kansas City, Mo.—Theo. W. Mertens Ice and Coal Company has let contract for an 11-ton ice machine.

Holden, Mo.—The Holden Ice and Fuel Company has let contract for a 25-ton refrigerating machine.

Foley, Ala.—The Swanstrom Brothers Mill Company has let contract for a 12-ton refrigerating machine.

Tampa, Fla.—The Gillett Lumber and Transportation Company is considering doubling capacity of its ice plant.

Barton, Fla.—The Board of Trade is interested in securing the erection of a cold storage and pre-cooling plant.

Montgomery, Ala.—The Alabama Storage and Ice Company has placed an order for a 12-ton refrigerating machine.

Leesburg, Va.—T. F. Maffert has let contract for a 20-ton refrigerating machine, 10-ton freezing and distilling system.

Lyons, N. Y.—The Lyons Cold Storage Company has awarded contract for the installation of machinery in its ice plant here.

Tupelo, Miss.—A contract for a 50-ton refrigerating machine and 20-ton freezing system has been let by the Tupelo Oil and Ice Company.

Mt. Carmel, Ill.—Hennebergers' new ice plant in the north part of the city is now practically completed. The work on the plant has been under way for the past several months. It is announced that the plant will open the last part of this week.

COLD STORAGE OF FISH.

An interesting contribution to the fund of information on the effect of cold storage on fish is quoted in the current issue of The Pacific Fisherman from an investigation of the subject by the scientists of the Biochemical Laboratory of Columbia University, Dr. Clayton S. Smith and Drs. William A. Perlzweig and William J. Gies. The inquiry covers the effects of prolonged periods of cold storage temperatures upon the chemical composition and nutritive value of fish.

Both investigators give the results of a connected series of experiments upon the same lines and upon similar species of fish—eastern flounders—and the experiments show that fresh fish, similar in general character to flounders, such as halibut, millions of pounds of which are frozen annually on this coast and shipped to all parts of the country, may be preserved frozen, by the best cold storage processes, for at least two years without undergoing any important chemical alteration and without materially depreciating in nutritive value.

In part, the investigators state:

"These fish were selected because their habits imply that they might be particularly prone to bacterial decomposition in cold storage. The flounder is peculiarly a 'bottom fish,' in fact is in the mud or sand most of the time. The various lots of fish were taken from the dealer's ordinary commercial products, which had been handled from the water to Fulton Market, and in the cold storage plant, in accordance with the practical methods of the trade. As soon as a catch arrived at the wharf, three fish were sent to the laboratory and twenty-four others put into a cold storage plant.

At the plant the fish were suitably dipped, frozen and cold-stored as usual. Those which came to the laboratory arrived packed with cracked ice in an ordinary willow basket. The basket was lined with a water-proof paper, covered with burlap and the whole wrapped in heavy manila paper. The time in transit from the wharf to the laboratory was a little over an hour. Very little of the ice melted en route, and, with one exception, the fish were never in contact with free water in the basket.

Upon requisition, fish were taken from storage, wrapped separately in paper and sent at once to the laboratory, where they arrived in a short time. No appreciable thawing took place in transit. The storage samples, if received during the winter months, were kept over night under paper covers in shallow pans at room temperature. For the summer months this method of thawing was modified by placing the fish in an ordinary refrigerator over night and then allowing them to remain for an hour at room temperature the next morning. In either case, as soon as the fish were completely thawed, the analyses were begun.

In every instance before the fish was prepared for analysis the general external appearance was observed and, upon dissection, the color and texture of the muscle was also noted. A slight yellowish brown discoloration just under the skin was noted in the case of stored fish; in fresh fish there were certain gray subcutaneous areas. A difference in the consistency of the muscle of the stored fish was also noticed, that of the fresh fish being the firmer. These observations apply only to fresh fish kept on ice from 48 to 72 hours and to cold-stored fish immediately after thawing."

The methods of analysis were the most up-to-date possible. The examinations of the fish were divided into four series, (1) on fresh fish, (2) on fish stored for six months, (3) on

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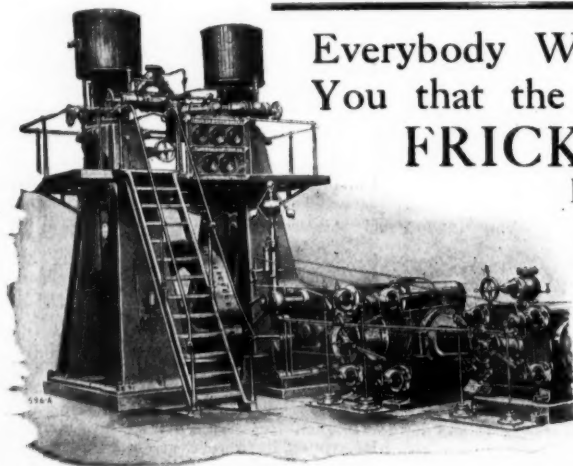
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DETROIT: Riverside Storage & Cartage Co., Newman Bros., Inc.
DALLAS: Oriental Oil Co.
HAVANA: O. B. Cintas.
INDIANAPOLIS: Railroad Transfer Co.
JACKSONVILLE: St. Elmo W. Acosta.
KANSAS CITY: Crutcher Warehouse Co.
LIVERPOOL: Peter R. McQuie & Son.
LOS ANGELES: United Iron Works.
LOUISVILLE: Union Warehouse, 7th and Magnolia Sts.
MILWAUKEE: Central Warehouse.

MEMPHIS: Patterson Transfer Co.
MEXICO, D. F.: Ernst O. Heinendorf.
NEWARK: American Oil & Supply Co.
NEW ORLEANS: Chas. F. Rantz.
NEW YORK: Roessler & Hasselacher Chemical Co., Shipley Construction & Supply Co.
NORFOLK: Nottingham & Wrenn Co.
OKLAHOMA CITY: O. K. Transfer & Storage Co.
PITTSBURGH: Pennsylvania Transfer Co.
PROVIDENCE: Rhode Island Warehouse Co.
ROCHESTER: Shipley Construction & Supply Co.
SALT LAKE CITY: Utah Soap Co.
ST. LOUIS: Pillsbury-Becker Engineering & Supply Co.
ST. PAUL: R. B. Whitacre & Co.
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SAVANNAH: Benton Transfer Co.; R. Zuck, Jr.
SPOKANE: United Iron Works.
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WATCH PAGE 48 FOR BARGAINS

fish stored for nine months, and (4) on fish stored for two years.

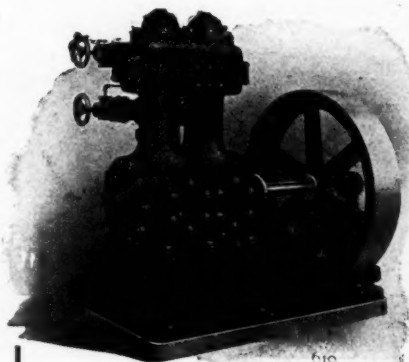
"General microscopic examination of the flesh indicated that there had been no material alteration of the fibres in any instance. Crystals of triple phosphate were never detected in or on any of the muscle fibres, a finding in accord with the data for ammonium nitrogen in the flesh. Kept in an ordinary refrigerator after their delivery to us, these fish, like fresh ones, appreciably deteriorated in a few days and crystals of ammonio-magnesium phosphate could then be detected in the flesh of all exposed surfaces. The whole fish and all portions of the flesh, in every instance (12 hours after thawing), were devoid of any odor that might indicate significant bacterial change (comparisons were made with fresh fish of the same kind).

"Some of the fish that had been subjected to analysis, including three in storage for two years, were served with meals in conventional ways to a number of people, the authors among them. These portions were palatable and entirely acceptable. The taste was slightly different, perhaps somewhat more 'fishy,' though not unpleasantly so, but otherwise there was nothing to suggest a lack of freshness.

"We do not suggest that our findings would apply in any degree to fish that were not strictly fresh and unspoiled before they were put in cold storage. It is obvious, also, that these results have no bearing on the condition of fish which have been removed from cold storage and kept a week or more in a shop, exposed, until sold, to public inspection during market hours, and iced or kept in a common refrigerator at night. It is equally obvious that these data have no material bearing on the cold storage of anything except fish.

"The results of our studies convince us that fresh fish, similar in general character to flounders, may be preserved frozen, by the best cold storage processes, for at least two years without undergoing any important chemical alteration, and without materially depreciating in nutritive value."

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Mechanical Refrigeration Pays

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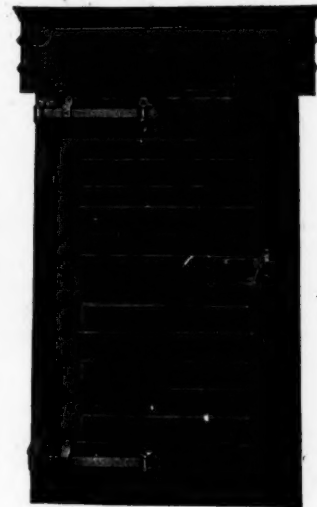
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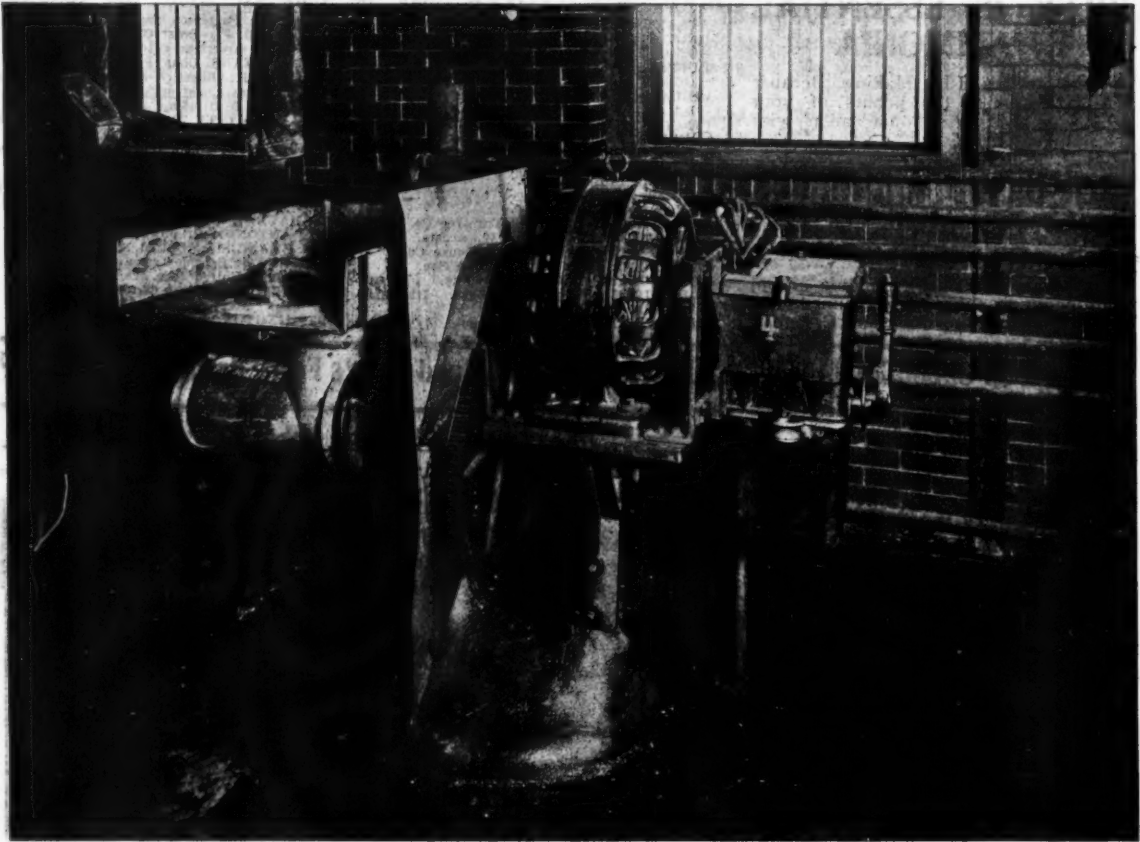
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On and after September 1st, 1914, "Jones Cold Storage Door Company" will change its corporate name and will thereafter be known as—

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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces, pork and bee, by the barrel or tierce and hogs by the hundredweight.

Values Lower—Hog Movement Larger—Hog Prices Decline—Speculative Liquidation—New Low Levels Reached—Cash Distribution Moderate.

The movement of hog product values during the week was again downward, with new low levels touched on the decline. The liquidation in products was quite pronounced, and lard broke below 10c. per pound for the first time in months. At the opening of the week there was a sudden heavy movement of hogs at Chicago, which brought unexpected pressure on the market and a sharp decline in product values, but later in the week the market steadied a little, with some covering of shorts on the packing statistics, showing a further decrease compared with last year.

The week's packing was a little larger than the previous week. The total was 536,000 compare with 453,000 the preceding week, but the total for the week last year was 607,000; the grand total since March 1 has been 5,067,000, against 5,647,000 a year ago, a decrease of 580,000. The fact that the movement of hogs has been increasing recently compared with the movement for the period just preceding has had a somewhat bearish effect, but the total decrease compared with a year ago is now so large that the trade is disposed to look for a movement less than last year's for some time to come.

The quality of the hogs received has been fairly good of late, as shown by the weights and by the yields of lard. The fact that the quality is keeping up so well is one of the points which is being used against values, particularly with the rather slow distribution of product. The export movement of product is still quiet, and the shipments for the past week were only 6½ million pounds of meats, and 8,142,000 pounds of lard. The decrease in the movement of meats for the season has been 16¼ million pounds, and the decrease in the exports of lard nearly 93,000,000 pounds. The fact that the distribution of product for export, particularly of lard, has been so light is one of the disappointing features in the situation, and has made it difficult for the market to maintain the occasional rallies which took place.

This condition is illustrated in the movement of values for the season. The range of values for the season since trading began in the active deliveries, and the range during the month just ending with the closing prices Thursday night, for these deliveries, shows the general tendency of the market, and the relation of the present prevailing values to the range of values which has been seen up to date:

	Season		May		Close
	High	Low	High	Low	May 28
Pork—					
July	\$21.82½	\$19.50	\$20.22½	\$19.50	\$19.82½
Sept.	21.87½	19.62½	20.27½	19.62½	19.67½
Lard—					
July	11.50	9.75	10.27½	9.72½	9.72½
Sept.	10.57½	9.90	10.40	9.87½	9.87½
Ribs—					
July	*11.90	10.87½	11.45	11.00	11.10
Sept.	11.95	11.00	11.55	11.12½	11.17½

The speculative situation in the market is at present evidently governed by the influence

of the movement of hogs, and the tendency of product stocks. So far there has been nothing in the tendency of product stocks to indicate a distribution sufficiently large to offset the output from week to week. On account of the lower prices which are prevailing, the trade is looking forward with a good deal of interest to the end of May figures, not only at Chicago, but throughout the west. It is expected that these figures will show moderate inroad on the stocks of meats, but the question as to the supply of lard is not so clear, as the demand has not been very satisfactory. With the increasing tendency of the hog movement recently, as shown by the increasing packing, there is a little disposition to be conservative in the matter, and to look for rather moderate changes in stocks on hand.

With the recent development in weather conditions, and the reports of deteriorating conditions for the feed crops, there has also been a tendency to be more conservative as to the attitude of farmers in the movement of hogs to market. It is pointed out that if the weather conditions the next few weeks are not such as to promise a liberal feed crop, this will be reflected to some extent in the action of the market, as well as in the movement of live stock to market.

LARD.—Dull conditions in the spot market and lower markets at packing centers have forced further concessions in spot lard. Trade at the lower prices continues dull with export demand quiet. City steam, 9½@9¾c.; Middle West, \$9.70@9.80; Western, \$9.95; refined, Continent, \$10.40; South American, \$11.05; Brazil, kegs, \$12.05; compound lard, 8½@8¾c.

PORK.—The market is quiet with the tone a little easier on the general dullness in hog products and lower lard market. Mess is quoted \$22@22.50; clear, \$19.50@21; family, \$23@26.

BEEF.—Trade is quiet with values about steady. Family, \$19@20; mess, \$17.75@18.75; packet, \$18@19; extra India mess, \$27@28.

SEE PAGE 39 FOR LATER MARKETS.

EXPORTS OF HOG PRODUCTS.

Exports of hog products from New York reported up to Wednesday, May 27, 1914:

BACON.—Bergen, Norway, 12,500 lbs.; Christiania, Norway, 64,128 lbs.; Cienfuegos, Cuba, 51,919 lbs.; Cadiz, Spain, 9,689 lbs.; Drontheim, Norway, 2,750 lbs.; Genoa, Italy, 5,191 lbs.; Hamilton, W. I., 960 lbs.; Hull, England, 129,107 lbs.; London, England, 39,409 lbs.; Liverpool, England, 574,176 lbs.; Manchester, England, 12,360 lbs.; Nuevitas, Cuba, 14,493 lbs.; Para, Brazil, 17,850 lbs.; Rio Janeiro, Brazil, 11,000 lbs.; St. Johns, N. F., 4,200 lbs.; Santiago, Cuba, 15,908 lbs.; Stockholm, Sweden, 15,925 lbs.; Sundsvall, Sweden, 31,030 lbs.; Trieste, Austria, 5,500 lbs.

HAMS.—Antwerp, Belgium, 41,040 lbs.; Barcelona, Spain, 12,537 lbs.; Buenaventura, Colombia, 1,096 lbs.; Cayenne, French Guiana, 2,018 lbs.; Corinto, Peru, 1,039 lbs.; Cienfuegos, Cuba, 17,105 lbs.; Dominica, W. I., 1,176 lbs.; Demerara, British Guiana, 6,728 lbs.; Guadeloupe, W. I., 4,016 lbs.; Hull, England, 114,000 lbs.; Havana, Cuba, 1,400 lbs.; Hamilton, W. I., 6,844 lbs.; Kingston, W. I., 1,030 lbs.; London, England, 72,000 lbs.; Liverpool, England, 407,821 lbs.; Man-

chester, England, 34,488 lbs.; Nuevitas, Cuba, 10,770 lbs.; Paramaribo, Dutch Guiana, 6,343 lbs.; Port of Spain, W. I., 992 lbs.; Port Limon, C. R., 594 lbs.; Puerto Cabello, Venezuela, 3,109 lbs.; Port au Prince, W. I., 1,284 lbs.; Rotterdam, Holland, 5,980 lbs.; St. Johns, N. F., 18,547 lbs.; Santiago, Cuba, 3,977 lbs.; Southampton, England, 43,590 lbs.; San Domingo, S. D., 7,416 lbs.; Turks Island, W. I., 855 lbs.

LARD.—Antofagasta, Chile, 3,400 lbs.; Aberdeen, Scotland, 56,894 lbs.; Antwerp, Belgium, 238,247 lbs.; Amsterdam, Holland, 7,440 lbs.; Bergen, Norway, 5,250 lbs.; Buenaventura, Colombia, 2,360 lbs.; Bremen, Germany, 71,400 lbs.; Bremerhaven, Germany, 5,500 lbs.; Cadiz, Spain, 13,100 lbs.; Christiania, Norway, 13,339 lbs.; Cartagena, Colombia, 10,644 lbs.; Corinto, Peru, 1,398 lbs.; Colon, Panama, 1,320 lbs.; Cienfuegos, Cuba, 306,803 lbs.; Cayenne, French Guiana, 7,106 lbs.; Dunkirk, France, 10,650 lbs.; Dominica, W. I., 14,003 lbs.; Demerara, British Guiana, 16,600 lbs.; Guadeloupe, W. I., 2,550 lbs.; Genoa, Italy, 4,950 lbs.; Hamilton, W. I., 3,070 lbs.; Hamburg, Germany, 733,131 lbs.; Hull, England, 297,080 lbs.; Havre, France, 50,301 lbs.; Iquique, Chile, 5,680 lbs.; Kingston, W. I., 4,214 lbs.; Leith, Scotland, 10,213 lbs.; La Palmas, A. R., 2,800 lbs.; Lagos, Spain, 2,410 lbs.; Liverpool, England, 343,143 lbs.; London, England, 277,801 lbs.; Malta, Island of, 2,800 lbs.; Manchester, England, 244,065 lbs.; Nuevitas, Cuba, 24,883 lbs.; Port of Spain, W. I., 7,690 lbs.; Puerto Cabello, Venezuela, 4,895 lbs.; Panama, Panama, 8,042 lbs.; Port au Prince, W. I., 65,318 lbs.; Para, Brazil, 20,234 lbs.; Rotterdam, Holland, 1,356,652 lbs.; Riga, Russia, 17,105 lbs.; Santander, Peru, 1,300 lbs.; St. Thomas, W. I., 722 lbs.; Santiago, Cuba, 3,650 lbs.; Stavanger, Norway, 8,750 lbs.; Stettin, Germany, 88,205 lbs.; Southampton, England, 50,400 lbs.; St. Johns, N. F., 5,900 lbs.; San Domingo, S. D., 34,845 lbs.; Trieste, Austria, 28,550 lbs.; Trinidad, W. I., 82,440 lbs.; Turks Island, W. I., 3,270 lbs.; Zanzibar, Zanzibar, 1,500 lbs.

PORK.—Christiania, Norway, 50 bbls.; Cayenne, French Guiana, 10 bbls.; Dunkirk, France, 22 pa.; Dominica, W. I., 49 bbls.; Demerara, British Guiana, 393 bbls.; Guadeloupe, W. I., 43 bbls.; Hamburg, Germany, 100 bbls.; Hamilton, W. I., 9 bbls.; Kingston, W. I., 27 bbls.; Liverpool, England, 50 bbls., 18 tes.; London, England, 20 bbls.; Nuevitas, Cuba, 8 pa.; Paramaribo, Dutch Guiana, 120 bbls.; Port of Spain, W. I., 221 bbls., 96 tes.; Port au Prince, W. I., 89 bbls., 6 tes.; San Domingo, S. D., 21 bbls.; St. Thomas, W. I., 15 bbls.; St. Johns, N. F., 1,079 bbls.; Trinidad, W. I., 303 bbls.; Turks Island, W. I., 10 bbls.

SAUSAGE.—Antwerp, Belgium, 175 bx.; Oran, Algeria, 100 bx.; San Domingo, S. D., 104 pa.

EXPORTS OF BEEF PRODUCTS.

Exports of beef products from New York reported up to Wednesday, May 27, 1914:

BEEF.—Bergen, Norway, 40 bbls.; Cayenne, French Guiana, 348 bbls.; Corinto, Peru, 43 bbls.; Colon, Panama, 38 bbls.; Curacao, Leeward Islands, 50 bbls.; Dominica, W. I., 42 bbls.; Demerara, British Guiana, 272 bbls., 5 tes.; Guadeloupe, W. I., 90 bbls.; Halifax, N. S., 25 bbls.; Hamilton, W. I., 10 bbls.; Kingston, W. I., 105 bbls.; Lagos, Spain, 25 bbls.; London, England, 25 bbls.; Montego Bay, W. I., 12 bbls.; Nuevitas, Cuba, 6 bbls.; Paramaribo, Dutch Guiana, 310 bbls., 6 tes.; Port of Spain, W. I., 36 bbls.; Panama, Panama, 29 bbls.; Port au Prince, W. I., 9 bbls.; Rotterdam, Holland, 50 bbls.; St. Thomas, W. I., 5 bbls.; St. Johns, N. F., 570

bbls.; San Domingo, S. D., 7 bbls.; Trinidad, W. I., 176 pkgs.

FRESH MEAT.—Hamilton, W. I., 3,026 lbs.; Liverpool, England, 56,636 lbs.

OLEO OIL.—Alexandria, Egypt, 50 cs.; Antwerp, Belgium, 175 tes.; Bremen, Germany, 50 tes.; Bergen, Norway, 120 tes.; Christiansand, Norway, 25 tes.; Copenhagen, Denmark, 25 tes.; Genoa, Italy, 10 tes.; Hamburg, Germany, 945 tes.; Liverpool, England, 95 tes.; Piraeus, Greece, 50 tes.; Rotterdam, Holland, 4,520 tes.; Stavanger, Norway, 325 tes.

OLEO OIL.—From Baltimore to London, England, 58,050 lbs.; Hamburg, Germany, 129,938 lbs.; Rotterdam, Holland, 116,400 lbs.

OLEOMARGARINE.—Colon, Panama, 2,410 lbs.; Dominica, W. I., 6,400 lbs.; Demerara, British Guiana, 2,900 lbs.; Guadeloupe, W. I., 3,150 lbs.; Hamilton, W. I., 1,110 lbs.; Kingston, W. I., 2,900 lbs.; Port au Prince, W. I., 1,215 lbs.; St. Thomas, W. I., 2,150 lbs.; St. Johns, N. F., 53,834 lbs.

TALLOW.—Cartagena, Colombia, 6,204 lbs.; Hamburg, Germany, 38,894 lbs.; San Domingo, S. D., 35,998 lbs.

TALLOW OIL.—Antwerp, Belgium, 75 tes.

TONGUE.—Hamburg, Germany, 40 pa.; Liverpool, England, 124 pa.; London, England, 554 pa.; Manchester, England, 100 pa.; Rotterdam, Holland, 10 bbls.

CANNED MEAT.—Amsterdam, Holland, 50 cs., 230 pa.; Bristol, England, 186 cs.; Buenos Aires, A. R., 216 pa.; Cayenne, French Guiana, 45 cs.; Dominica, W. I., 48 cs.; Demerara, British Guiana, 142 cs.; Hull, England, 178 cs.; Liverpool, England, 77 pa.; London, England, 383 pa.; Melbourne, Australia, 94 cs.; Manchester, England, 299 pa.; Puerto Cabello, Venezuela, 31 pa.; Santiago, Cuba, 360 cs.; St. Thomas, W. I., 44 cs.; Trieste, Austria, 76 pa.

GREEN AND SWEET PICKLED MEATS.

(Special Report to The National Provisioner from The Davidson Commission Co.)

Chicago, May 27.—Quotations on green and sweet pickled meats, f. o. b. Chicago, loose, are as follows:

Regular Hams—Green, 8@10 lbs. ave., 14½@14½c.; 10@12 lbs. ave., 13½@13½c.; 12@14 lbs. ave., 13½@13½c.; 14@16 lbs. ave., 13½@13½c. Sweet pickled, 8@10 lbs. ave., 13½@14c.; 10@12 lbs. ave., 13½@13½c.; 12@14 lbs. ave., 13@13½c.; 14@16 lbs. ave., 12½@13c.; 18@20 lbs. ave., 13½@14c.

Skinny Hams—Green, 14@16 lbs. ave., 14½@14½c.; 16@18 lbs. ave., 14½@14½c.; 18@20 lbs. ave., 14½@14½c.; 22@24 lbs. ave., 14½@14½c. Sweet pickled, 14@16 lbs. ave., 14½@14½c.; 16@18 lbs. ave., 14½@14½c.; 18@

20 lbs. ave., 14½@14½c.; 22@24 lbs. ave., 13½@13½c.

New York Shoulders—Green, 10@12 lbs. ave., 10½@11c. Sweet pickled, 10@12 lbs. ave., 10½@11c.

Picnic Hams—Green, 5@6 lbs. ave., 11½@11½c.; 6@8 lbs. ave., 10½@10½c.; 8@10 lbs. ave., 10½@10½c.; 10@12 lbs. ave., 10½@10½c. Sweet pickled, 5@6 lbs. ave., 11½@11½c.; 6@8 lbs. ave., 10½@10½c.; 8@10 lbs. ave., 10½@10½c.; 10@12 lbs. ave., 10½@10½c.

Clear Bellies—Green, 6@8 lbs. ave., 16¼@16¼c.; 8@10 lbs. ave., 15½@15½c.; 10@12 lbs. ave., 14½@14½c.; 12@14 lbs. ave., 13¾@13¾c. Sweet pickled, 6@8 lbs. ave., 15½@15½c.; 8@10 lbs. ave., 14½@15c.; 10@12 lbs. ave., 14½@14½c.; 12@14 lbs. ave., 13¾@13¾c.

PORK CUTS IN NEW YORK.

(Special Report to The National Provisioner from H. C. Zaun.)

New York, May 28.—Wholesale prices for green and sweet pickled pork cuts in New York City are as follows: Pork loins, 17@18c.; green hams, 8@10 lbs. ave., 15c.; do., 10@12 lbs. ave., 14½c.; do., 12@14 lbs. ave., 14½c.; do., 18@20 lbs. ave., 14c.; green clear bellies, 6@10 lbs. ave., 15½c.; do., 10@12 lbs. ave., 15c.; green rib bellies, 8@10 lbs. ave., 14½c.; S. P. hams, 8@10 lbs. ave., 14½c.; do., 10@12 lbs. ave., 14c.; do., 12@14 lbs. ave., 13¾c.; S. P. clear bellies, 6@8 lbs. ave., 14½c.; do., 8@10 lbs. ave., 14½c.; do., 10@12 lbs. ave., 14c.; do., 12@14 lbs. ave., 13¾c.; S. P. rib bellies, 12@14 lbs. ave., 14c.

Western prices as follows: Pork loins, 8@10 lbs. ave., 14½@15c.; do., 10@12 lbs. ave., 13½c.; do., 12@14 lbs. ave., 12½c.; do., 14@16 lbs. ave., 12c.; skinned shoulders, 12c.; boneless butts, 15½c.; Boston butts, 13½@14c.; lean trimmings, 14c.; regular trimmings, 9c.; spareribs, 11½c.; neck ribs, 3c.; livers, 3c.; snouts, 5c.; tails, 8c.; kidneys, 5c.; ears, 3c.

Tierce goods: S. P. ribs (half sheets), \$29 @30; S. P. pig tongues, 12½c.; pig tails, \$24.

FOREIGN COMMERCIAL EXCHANGE.

New York, May 29.—Foreign commercial exchange rates were quoted today as follows:

London—			
Bankers' 60 days.....	4.85½	@4.85½	
Demand sterling.....	4.835	@4.840	
Commercial, 60 days.....	4.85	@4.85½	
Paris—			
Commercial, 90 days.....	5.20%	@5.20%+1-16	
Commercial, 60 days.....	5.19%	@5.19%+1-16	
Commercial, sight.....	5.16½	-1-16@5.16½	
Berlin—			
Commercial, 90 days.....	94 7-16	@ 94½	
Commercial, 60 days.....	94 11-16	@ 94½	
Commercial, sight.....	95½	@ 95 3-16	
Antwerp—			
Commercial, 60 days.....	5.23½	-1-16@5.23½	
Amsterdam—			
Commercial, 60 days.....	39 15-16	@39 15-16+1-32	

EXPORTS SHOWN BY STEAMERS.

Exports of commodities from New York to foreign ports for the week ending Thursday, May 21, 1914, as shown by Williams & Terhune's report, are as follows:

Steamer and Destination.	Oil Cake.	Cottonseed Oil.	Bacon and Tallow.	Beef.	Pork.	Lard.
	Bags.	Bbls. Pkgs.	Boxes.	Pkgs.	Bbls.	Tcs. and Pkgs.
Lusitania, Liverpool.....			591	68	240	1775
Cedric, Liverpool.....			1215	95	324	2250
Minnehaha, London.....			54	25	40	3598
St. Paul, Southampton.....			526	130	1175	
Galileo, Hull.....	49		502	34	131	2882
Canning, Manchester.....			105		1000	1975
Columbia, Glasgow.....			1128	80	75	350
President Lincoln, Hamburg.....					2150	3640
George Washington, Bremen.....				25	200	300
Ryndam, Rotterdam.....	7000	100	10		795	3760
Uranium, Rotterdam.....	3500					50
Oscar II, Baltic.....		125	270	39	50	360
Finland, Antwerp.....	7943		215	80	50	184
Patria, Marseilles.....	1348					
Montevideo, Barcelona.....			15			100
Carpathia, Mediterranean.....		50	35			105
Hamburg, Mediterranean.....		50				
Castara, Mediterranean.....		50	120			120
San Giovanni, Mediterranean.....						1150
Belvedere, Mediterranean.....						15
Total.....	19791	424	4786	446	210	5944

WESTERN FERTILIZER MARKET.

(Special Letter to The National Provisioner from The Davidson Commission Co.)

Chicago, May 27, 1914.—The market for animal ammoniates continues extremely weak, practically no trading of any kind being done. High grade blood can be bought as low as \$2.90 per unit and possibly less, with a bid for delivery during the summer months. High-grade ground tankage is nominally held at \$2.75 and 10c., and some packers claim they will not shade this price, preferring to hold both their blood and tankage for the fall and winter trade, but with bids in hand the price can probably be shaded materially for round lots, prompt and summer delivery.

Low grade tankage, packers' unground tankage and country renderers' stock are all in same shape as the higher grades, and business is practically suspended until buyers and sellers can get nearer together in their views. (Complete quotations will be found on page 37.)

LIVESTOCK AND BEEF EXPORTS.

Exports of livestock and dressed beef from United States and Canadian ports for the week ending May 23, 1914, are reported by Williams & Terhune as follows:

Port.	Cattle.	Sheep.	Beef.
From New York.....	—	—	—
From Boston.....	—	—	—
From Philadelphia.....	—	—	—
From Baltimore.....	—	—	—
From Montreal.....	—	—	—
Total.....	—	—	—
Total last week.....	—	—	—

EXPORTS OF PROVISIONS

Exports of hog products for the week ending May 23, 1914, with comparisons:

	Week ending May 23, 1914.	Week ending May 24, 1913.	From Nov. 1, '13, to May 23, 1914.
PORK, BBLs.			
United Kingdom.....	217	399	10,186
Continent.....	5	64	5,491
So. & Cen. Am.....	145	662	6,327
West Indies.....	871	1,086	35,645
Br. No. Am. Col.....	24	71	14,033
Other countries.....	—	5	270
Total.....	1,202	2,267	71,961
MEATS, LBS.			
United Kingdom.....	5,567,075	6,449,900	170,024,490
Continent.....	485,375	954,775	13,437,465
So. & Cen. Am.....	40,000	64,250	2,438,475
West Indies.....	127,975	235,375	4,700,225
Br. No. Am. Col.....	14,175	—	119,000
Other countries.....	—	—	20,500
Total.....	6,234,000	7,704,300	190,830,155
LARD, LBS.			
United Kingdom.....	3,391,650	4,722,178	130,564,371
Continent.....	4,026,825	4,067,975	95,104,139
So. & Cen. Am.....	168,480	271,450	10,315,574
West Indies.....	541,646	467,150	13,088,788
Br. No. Am. Col.....	2,970	38,510	354,680
Other countries.....	10,500	—	420,040
Total.....	8,142,071	9,597,263	249,847,552

RECAPITULATION OF THE WEEK'S EXPORTS.

From—	Pork, bbls.	Meats, lbs.	Lard, lbs.
New York.....	796	2,423,275	5,881,076
Roston.....	111	395,325	151,995
Philadelphia.....	—	38,000	774,000
New Orleans.....	355	115,000	1,369,000
Montreal.....	—	2,562,000	1,966,000
Quebec.....	—	671,000	—
Total.....	1,202	6,234,000	8,142,071
Previous week.....	4,448	3,937,465	7,497,635
Two weeks ago.....	1,715	4,702,410	7,519,403
Cor. week last y'r.....	2,267	7,704,300	9,597,263

COMPARATIVE SUMMARY OF EXPORTS.

	From Nov. 1, '13, to May 23, '14.	Same time last year.	Decrease.
Pork, lbs.....	14,392,200	14,896,600	504,400
Meats, lbs.....	190,830,155	206,551,050	15,720,895
Lard, lbs.....	249,847,552	342,623,164	92,775,612

OCEAN FREIGHTS.

	Liverpool.	Glasgow.	Hamburg.
	Per ton.	Per ton.	Per 100 lbs.
Beef, per tierce.....	20/	22/6	@29c.
Oil Cake.....	10c.	13c.	@11c.
Bacon.....	20/	22/6	@29c.
Lard, tierces.....	20/	22/6	@29c.
Cheese.....	25/	30/	@50c.
Canned meats.....	20/	22/6	@29c.
Butter.....	30/	30/	@29c.
Tallow.....	20/	22/6	@29c.
Pork, per barrel.....	20/	22/6	@29c.

TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—A few sales of prime city tallow have been reported at 6¼c., but not enough stuff was sold to change the contract price. There is still no feature to be noted in the tallow market. Buyers take a few lots as the product is required, and sellers are pursuing a similar conservative policy. Few in the trade are inclined to make predictions, other than that they anticipate a continuance of these small trading periods. It must be said, however, that the underlying situation is kept quite healthy by this mode of business, as accumulations are obviated, at manufacturing points, and stocks at consuming centers are kept down.

The foreign market has attracted very little attention of late. The London auction sale resulted in the offering of 1,369 casks, of which 825 were taken at prices 3d. decline to 3d. advance. As far as can be learned, export business is at a minimum. Only some of the lowest grade greases are being worked. On the other hand, less is heard of importations of tallow to the United States. Any fresh offerings would probably have a depressing effect on values. Prime city tallow is quoted at 6¼@6¾c. and city specials at 6¾c. asked.

OLEO STEARINE.—The market is quiet and virtually without change. The price basis remains at 8¼c., as has been the case for several weeks. Lard makers are the principal buyers, and demand from this source lacks volume.

OLEO OIL.—A little falling off in the demand was seen this week with a small recession in values. Sales were reported in Rotterdam at 1 florin decline. Extras are quoted at New York at 10¼c., and 58 florins at Rotterdam.

SEE PAGE 39 FOR LATER MARKETS.

GREASE.—Trading continues quiet with the market a little easier in tone with other fats. Quotations are nominal, as follows: Yellow, 5½@6½c.; bone 5¾@6¼c.; house, 5¾@6¼c.

COCOA NUT OIL.—Quiet trade and a little increase in selling pressure has brought a small easing in values. Demand is quiet and without feature: Cochin, 10½@11c.; arrival, 10¼@10½c.; Ceylon, 9¾@9¼c.; shipment, 9c.

CORN OIL.—The market has been again quiet with values a little lower on the general dullness of trade and lack of consuming demand. Prices quoted at \$6.45@6.55 in car lots.

SOYA BEAN OIL.—The market was again quiet with prices holding steady. Spot is quoted at 6½@6¾c.

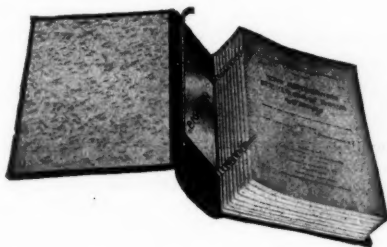
PALM OIL.—Trading has again been quiet with the tone about steady. Buyers show but limited interest and with dull demand a little easier tone prevails. Prime red spot, 6¾c.; to arrive, 6½@6¾c.; Lagos, spot, 7¼c.; to arrive, 7c.; palm kernel, 8¾@9c.; shipment, 8¾@9c.

NEATSFOOT OIL.—Demand has continued quiet with trading in moderate lots. For 20 cold test, 96@97c.; 30 do., 88c.; 40 do., water white, 80@82c.; prime, 67c.; low grade, off yellow, 63c.

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FRESH MEAT AND OFFAL IMPORTS.

Imports of fresh beef into the port of New York for the past week amounted to 60,233 quarters, compared to 9,947 quarters last week and 17,211 quarters two weeks ago. Direct shipments from South America included 36,442 chilled and 12,961 frozen quarters of beef. Shipments from Australia comprised 9,160 quarters of frozen beef. Shipments via England comprised 1,670 quarters of chilled beef.

Veal arrivals included 6,772 carcasses and parts from Australia and 1,889 quarters, etc., from South America.

Mutton and lamb imports totalled 25,445 sheep and 6,283 lambs. No sheep or lambs last week. Arrivals of canned meats included 4,813 cases via Europe, 2,795 cases from South America and 16,826 cases from Australia.

Offal imports included 19,653 bags and packages of beef and mutton offal, including beef loins, ribs, hearts, clods, shank meats, butts, boneless meat, etc. There was also 1,329 bags of bones and bone dust.

Imports of fresh beef into the port of New York for the week ending May 23 amounted to 9,947 quarters, compared to 17,211 quarters the previous week and 10,824 quarters two weeks before. Shipments were all via England, chilled beef. Arrivals also included 1,561 packages of beef and mutton offal, 1,893 bags of bones and other by-products of like character. Arrivals of canned meats included 232 cases via Europe.

OLEO AND NEUTRAL LARD.

(Special Report to *The National Provisioner*.)

New York, May 27, 1914.—Extra oleo oil has become more active this week at a lower price level than we had in the preceding weeks. Neutral lard was taken hold of by the European buyers, but at a considerable reduction in price. The steam lard market continues to develop weakness in view of this week's heavy hog arrivals and the large accumulation of steam lard at the Western packing points. There continues to be complaint about unsatisfactory spot demand for steam lard. Oleo stearine has become very soft at 8½ and tallow has gone lower. The cotton oil option market has declined still further and export business in cotton oil is as dead as it has been for many months past.

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COTTON OIL CABLE MARKETS

Hamburg.

(By Cable to The National Provisioner.)

Hamburg, May 29.—Market dull. Quotations: Choice summer white oil, 75¼ marks; butter oil, 75¼ marks; summer yellow, 70 marks.

Rotterdam.

(By Cable to The National Provisioner.)

Rotterdam, May 29.—Market dull. Quotations: Summer yellow, 41½ florins; choice summer white, 44¼ florins, and butter oil, 44¼ florins.

Antwerp.

(By Cable to The National Provisioner.)

Antwerp, May 29.—Market dull. Quotations: Summer yellow, 84¼ francs.

Marseilles.

(By Cable to The National Provisioner.)

Marseilles, May 29.—Market dull. Quotations: Prime summer yellow, 91 francs; prime winter yellow, 93½ francs; choice summer white oil, 94¼ francs.

Liverpool.

(By Cable to The National Provisioner.)

Liverpool, May 29.—Market easy. Quotations: Prime summer yellow, 35¼s.; summer yellow, 34¼s.

SOUTHERN MARKETS

Atlanta.

(Special Wire to The National Provisioner.)

Atlanta, Ga., May 28.—Crude cottonseed oil, 45½c.; very dull. Meal weaker at \$25.50 @25.75 for 7½ per cent. prime. Hulls nominal at \$7.50, but neglected.

Columbia.

(Special Wire to The National Provisioner.)

Columbia, S. C., May 28.—Crude cottonseed oil, 46c.; Carolina stocks now very small.

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., May 28.—Cottonseed oil market dull; prime crude, 46@46½c. Prime 8 per cent. meal quiet at \$27.50. Hulls dull at \$8@8.25, loose.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, May 28.—Basis prime crude cottonseed oil lower at 46c.; stocks about exhausted. Prime meal, 8 per cent. scarce at \$30. New Orleans, bagged; 7½ per cent., \$28.50. Hulls firm at \$9.50 loose, \$11.50 sacked, New Orleans.

CHEMICALS AND SOAP SUPPLIES.

(Special Report to The National Provisioner.)

New York, May 28.—Latest quotations on chemicals and soap supplies are as follows: 74 or 76 per cent. caustic soda, \$1.55@1.65 basis 60 per cent.; 60 per cent. caustic soda, \$1.80 per 100 lbs.; 98 per cent. powdered caustic soda in bbls., 2¼@2½c. per lb.; 58 per cent. soda ash, 80c. per 100 lbs. basis 48 per cent.; 48 per cent. carbonate of soda ash, 95c. per 100 lbs.; tale, 1¼@1½c. per lb.; silic, \$15@20 per ton of 2,000 lbs.; marble flour, \$8 per ton of 2,000 lbs.; silicate of soda, 90c. per 100 lbs.; chloride of lime in casks 1½c. and in bbls. 2c. per lb.; carbonate of potash,

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and the Children happy by getting
that Can of*



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their dinner with it.*

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COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspegren & Co.)

New York, May 27, 1914.—The market since our last report was quite active both as to volume of trading and fluctuations. From the close of May 13 the market advanced some 13 to 15 points on quite heavy buying for consuming accounts. The vigorous buying by the consuming trade, however, caused shorts to turn liberal buyers. The consuming trade gradually withdrew as the market advanced and on the 18th the crest of the advance was reached. The declining lard market was also beginning to be felt by heavier offerings of "longs" and by short selling for Western accounts. This selling brought about almost daily declines. The warmer weather in the South also brought out quite considerable of the independent mills' holdings of crude oil, helping the decline along. In fact, the heaviest selling for crude oil was reported the past two days, very nearly at the lowest prices for this movement. Outside of the October delivery the market closed today at virtually unchanged prices since our last report.

The action of the market from now on will probably be influenced to a great extent by the daily reports on cotton conditions, but any permanent improvement in values must ultimately depend upon the demand from the consuming trade, which in turn, will be influenced by the action of the lard market.

	Previous Closing May 13.		Today's Closing May 27.	
June	7.19 b	7.23 a	7.25	7.00 7.15 b 7.18 a
July	7.29 b	7.30 a	7.43	7.18 7.24 b 7.25 a
August	7.40 b	7.41 a	7.53	7.32 7.39 b 7.40 a
September	7.47 b	7.49 a	7.58	7.40 7.45 b 7.46 a
October	7.05 b	7.20 a	7.23	7.09 7.23 b 7.28 a

SOUTH CAROLINA CRUSHERS MEET.

The annual convention of the South Carolina Cotton Seed Crushers' Association will be held at Wrightsville Beach, June 16, 17 and 18. This is one of the most progressive associations in the industry and it is doing a work of great practical value, not only among its own members and the oil trade, but also among farmers and consumers. The convention program will include addresses by Prof. W. A. Withers, of the A. M. College, Raleigh, N. C., on "Cottonseed Meal as a Hog Feed"; W. H. Barton, Clemson College, on "The New Cattle Industry and What It Means to the Farmers and the Oil Mills of the State"; H. W. Barre, Clemson College, "Cotton Diseases and Means of Prevention and Eradication"; S. J. Summers, Cameron, "Co-operation Between the Farmer and the Oil Mills"; E. M. Nighbert, Washington, on "Co-operative Methods in Tick Eradication."

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COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association, and the Mississippi Cottonseed Crushers' Association.

Small Price Changes—Conflicting Influences— Sentiment Bearish—Bullish Cotton Con- ditions Offset Heavy Lard Market.

Those who are in the habit of expressing an opinion believe that lower cotton oil values are inevitable. There was no special selling during the week, however. A sensational rise in the cotton market, which did not have manipulation or an extended short interest for its basis, seemingly came in for a great deal of attention in oil circles. It was but natural that the very unsatisfactory crop news from the western belt should have influence. The sort of information that came to hand concerning the excessive rains in Texas and Oklahoma, and the drought in the eastern belt, did much to offset the vehement claims that actual cottonseed oil was hard to sell.

There were several reasons given why cottonseed oil should sell lower, apart from the statement that consuming inquiry was of a hand-to-mouth character. The fact that the lard market continues to sag, and is now more than a cent a pound under last year, while cottonseed oil values are on about the same basis as that prevalent a year ago was a popular argument for a decline in oil. The contention was also made that the big re-

finers were the leading shorts, in the nature of hedges, and that these interests could not be squeezed, nor would they buy much before the seven-cent level for the July delivery was reached.

It would seem rather late to inaugurate a bull campaign in the oil market, as far as the old crop options are concerned, but such a proceeding would not be unprecedented. The records show that it was in June that last year's flurry really assumed magnitude. However, if there is to be a duplication of the events of last season, the admission is made that trade demand will have to improve, and at this date neither foreign nor home users deem it worth while to carry a stock of oil. Of course, should the cotton conditions continue unfavorable, they are bound to have weight on consumers, who thus far have contented themselves with the theory that there is enough oil to last through the old season, and a cotton crop cannot be destroyed before the summer really sets in. An upturn in lard might also easily serve to intimidate users of cotton oil, but many take it for granted that there will be no advance in the provision market.

It is interesting to note that the fall deliveries in the cotton oil contract market as

of this date are selling about thirty points higher than last year, although the summer months are at just about the same price. This is, without question, a reflection of the bad start of the Texas and Oklahoma cotton crops. Furthermore, the fact is apparently emphasized that certain oil users are holding no stocks of importance, thus insuring to a degree, a certain amount of buying of a continuous character. Of course, there are interests who always require oil.

Perhaps exaggeration is taking place in the tenor of advices from the extreme southwest, but the cotton market has risen over \$6 per bale, and interests actively engaged in the oil industry are not willing to consider offers for their prospective new crush. The situation would be less serious if the States that yielded the first oil supplies were not affected. To dwell on cotton conditions at this time would seem premature, yet there are far-sighted authorities who regard this feature as of great importance, subordinating lard fluctuations to it. It is confidently declared that the cotton Government Report on June 1 will be extremely bullish and that since the average date of the Agricultural Department's returns, May 25, conditions have suffered a further set-back.

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CAKE, ASHES,
MEAL, HULLS.

GOLD MEDALS AWARDED

Chicago, 1893.
San Francisco, 1894.
Atlanta, 1895.
Paris, 1900. Buffalo, 1901.
Charleston, S. C., 1902.
St. Louis, 1904.

Torrential rains in the west have prevented re-planting, and have also interfered with germination of the seed, while some cool nights, and drought in the east, have led to numerous complaints of a late and unsatisfactory start. Ideal weather through the summer would doubtless cause a material betterment, and a more optimistic tone to the cotton crop and news appertaining thereto. Yet it is realized that this is essential, as a big crush of cotton oil is required by the oil trade, just as an immense cotton yield is needed by cotton-goods manufacturers. Perhaps it is only fair to mention that consideration of this latter feature has been a potent factor in the recent excited advance of the cotton market.

Reverting to lard, and its influence on cotton oil, there are many authorities who aver that compound lard will be sold in substantial quantities, even though its price should be equal to that of animal lard. Still, it cannot be denied that distribution of cotton oil and compound lard is quickened by strength in the pure lard market, and, furthermore, that compound lard makers cannot pay high, or fairly high, prices for cotton oil and sell their product cheap or in competition with a declining natural product market.

Closing prices, Saturday, May 23, 1914.—Spot, \$7@7.17; May, \$7@7.15; June, \$7.10@7.14; July, \$7.25@7.26; August, \$7.37@7.39; September, \$7.45@7.46; October, \$7.16@7.17; November, \$6.75@6.90; December, \$6.65@6.75. Futures closed at 1 decline to 1 advance. Sales were: July, 4,600, \$7.25@7.23; August, 100, \$7.36; September, 2,100, \$7.45@7.43; October, 600, \$7.17@7.16. Total sales, 7,400 bbls. Good off, \$6.95@7.12; off, \$6.80@7.12; reddish off, \$6.60@7.05; winter, \$7.20; summer, \$7.20; prime crude, S. E., \$6.13@6.20; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Monday, May 25, 1914.—Spot, \$7.08@7.18; May, \$7.09@7.17; June, \$7.11@7.14; July, \$7.25@7.26; August, \$7.39@7.40; September, \$7.44@7.46; October, \$7.15@7.23; November, \$6.80@6.90; December, \$6.65@6.75. Futures closed at 9 advance to 1 decline. Sales were: June, 1,800, \$7.10@7.09; July, 6,000, \$7.26@7.23; August, 2,000, \$7.40@7.36; September, 800, \$7.44. Total sales, 10,600 bbls. Good off, \$6.93@7.10; off, \$6.83@7.08; reddish off, \$6.50@7; winter, \$7.20; summer, \$7.25@8; prime crude, S. E., \$6.07@6.20; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Tuesday, May 26, 1914.—Spot, \$7.13@7.19; May, \$7.13; June, \$7.13@7.14; July, \$7.21@7.22; August, \$7.36@7.38; September, \$7.41@7.42; October, \$7.19@7.22; November, \$6.80@6.90; December, \$6.73@6.80. Futures closed at 13 advance to 4 decline. Sales were: June, 2,500, \$7.12@7.09; July, 3,200, \$7.25@7.20; August, 1,700, \$7.40@7.38; September, 4,700, \$7.45@7.40; October, 1,400, \$7.22@7.20; December, 100, \$6.70. Total sales, 13,600 bbls. Good off, \$6.95@7.15; off, \$6.85@7.15; reddish off, \$6.50@7.12; winter, \$7.20; summer, \$7.20; prime crude, S. E., \$6.07@6.20; prime crude, Valley, nom.; prime crude, Texas, nom.

Closing prices, Wednesday, May 27, 1914.—Spot, \$7.10@7.19; June, \$7.15@7.18; July, \$7.24@7.25; August, \$7.39@7.40; September, \$7.45@7.46; October, \$7.23@7.28; November, \$6.87@6.91; December, \$6.78@6.90; January, \$6.75@7. Futures closed at 2 to 7 advance. Sales were: June, 500, \$7.13@7.12; July, 6,200, \$7.24@7.21; August, 2,800, \$7.40@7.36; September, 2,600, \$7.45@7.41. Total sales, 12,100 bbls. Good off, \$7@7.18; off, \$6.90@7.15; reddish off, \$6.65@7; winter, \$7.30; summer, \$7.30; prime crude, S. E., \$6.07@6.20; prime crude, Valley, nom.; prime crude, Texas, nom.

SEE PAGE 39 FOR LATER MARKETS.

CLOSING PRICES, THURSDAY, MAY 28, 1914.—

Spot, \$7.10@7.20; June, \$7.17@7.18; July, \$7.22@7.24; August, \$7.36@7.38; September, \$7.41@7.42; October, \$7.22@7.25; November, \$6.85@6.89; December, \$6.78@6.81; January, \$6.70@6.80. Futures closed at 2 advance to 5 decline. Sales were: June, 500, \$7.19@7.18; July, 2,200, \$7.25@7.24; August, 500, \$7.39@7.38; September, 3,100, \$7.45@7.43. Total sales, 6,300 bbls. Good off, \$7@7.17; off, \$6.95@7.12; reddish off, \$6.70@7; winter, \$7.30@8; summer, \$7.35@8; prime crude, S. E., \$6.07@6.13; prime crude, Valley, nom.; prime crude, Texas, nom.

EXPORTS OF COTTONSEED OIL.

Official government estimates of cottonseed oil exports for the month of April, by ports of shipment, are given as follows in pounds, with totals compared:

Customs districts.	Pounds.
Georgia	1,738,261
New York	7,267,819
Philadelphia	39,000
Virginia	372,840
Galveston	446,250
New Orleans	4,301,737
Buffalo	1,156,465
Dakota	245,740
Eastern Vermont	4,508
Michigan	1,168,201
St. Lawrence	1,333,855
Total April, 1914.....	18,074,676
1913.....	35,133,192

Total 10 months, April, 1914... 171,906,009
1913... 275,983,034
1912... 360,626,488

Exports of cottonseed oil for the past season to May 1, as reported by the government, are given in pounds as follows:

	Pounds.
September, 1913	2,479,304
October	11,951,400
November	24,934,352
December	27,036,786
January, 1914	30,374,725
February	16,912,612
March	26,932,519
April	18,074,676
Total 8 mos.....	158,696,374

COTTON OIL TRADE CONVENTIONS.

Alabama Cotton Seed Crushers' Association, Gulfport, Miss., June 11 and 12.

Mississippi Cotton Seed Crushers' Association, Pass Christian, Miss., June 15 and 16.

Georgia Cotton Seed Crushers' Association, Warm Springs, Ga., June 15 and 16. Warm Springs Hotel.

Texas Cotton Seed Crushers' Association, Galveston, Tex., June 15, 16 and 17. Hotel Galvez.

South Carolina Cotton Seed Crushers' Association, Wrightsville Beach, N. C., June 16, 17 and 18.

National Association of Oil Mill Superintendents, Dallas, Tex., June 10, 11 and 12.

COTTONSEED OIL EXPORTS

Exports of cottonseed oil reported for the week ending May 28, 1914, and for the period since September 1, 1913, were as follows:

From New York—	Week ending May 28, '14.	Since Sept. 1, '13.
Bbls.	Bbls.	Bbls.
Adelaide, Australia	—	64
Antwerp, Belgium	—	591
Bahia Blanca, A. R.	—	653
Barbados, W. I.	364	5,112
Barcelona, Spain	—	50
Belize, Honduras	2	52
Bergen, Norway	—	210
Bocas del Toro	—	38
Bordeaux, France	—	135
Bristol, England	—	25
Buenos Aires, A. R.	144	14,592
Callao, Peru	—	6
Cape Town, Africa	111	2,438
Cardenas, Cuba	—	5
Cartagena, Colombia	—	8
Ceara, Brazil	—	5
Christiania, Norway	—	465
Christiansand, Norway	—	105
Colon, Panama	146	2,569
Constantinople, Turkey	—	100
Copenhagen, Denmark	—	5,680
Cristobal, Panama	—	6
Curacao, Leeward Islands..	—	12
Demerara, British Guiana..	39	1,078
Fremantle, Australia	—	118
Fiume, Austria	—	100
Genoa, Italy	859	17,744
Gibraltar, Spain	—	25
Glasgow, Scotland	—	4,620
Hamburg, Germany	—	10,725
Havana, Cuba	19	1,601
Havre, France	—	8,390
Hull, England	—	737
Iquique, Chile	—	569
Kingston, W. I.	51	4,075
La Guaira, Venezuela	—	15
Las Palmas, A. R.	—	40
La Plata, A. R.	—	200
Liverpool, England	—	19,347
London, England	174	16,448
Macoris, S. D.	—	82
Manchester, England	—	9,367
Maracaibo, Venezuela	—	2
Marseilles, France	—	6,284
Matanzas, Cuba	—	165
Melbourne, Australia	—	272
Monte Cristi, S. D.	—	467
Montevideo, Uruguay	685	7,707
Naples, Italy	—	2,871
Nuevitas, Cuba	—	145
Para, Brazil	—	802
Piraeus, Greece	—	3,222
Ponce, P. R.	—	23
Port Antonio, W. I.	5	417
Port au Prince, W. I.	—	94
Port Limon, C. R.	—	379
Port Maria, W. I.	—	17
Porto Cortez, Honduras..	—	4
Progreso, Mexico	—	428
Puerto Plata, S. D.	—	23
Punta Arenas, Chile.....	—	452
Rio Janeiro, Brazil	—	4,076
Rotterdam, Holland	150	12,944
St. Johns, N. F.	—	75
St. John, W. I.	—	50
Sanchez, S. D.	11	882
San Domingo, S. D.	—	152
San Juan, P. R.	—	1,704

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Venus, Prime Summer White

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Santiago, Cuba	20	981
Santa Marta, Colombia	—	35
Santos, Brazil	—	3,131
Singapore, Straits Settlements	—	2
Southampton, England	—	200
Sydney, Australia	5	580
Trieste, Austria	75	17,248
Trinidad, W. I.	15	551
Turks Island, W. I.	—	16
Valparaiso, Chile	—	4,406
Venice, Italy	112	7,254
Vera Cruz	—	186
Total	2,087	210,140
From New Orleans—		
Antwerp, Belgium	450	6,435
Bocas del Toro	—	51
Bremen, Germany	—	965
Buenos Aires, A. R.	—	500
Christiania, Norway	—	10,665
Copenhagen, Denmark	—	225
Genoa, Italy	—	702
Glasgow, Scotland	—	125
Gothenberg, Sweden	—	1,775
Hamburg, Germany	140	5,708
Havana, Cuba	100	2,452
Kingston, W. I.	—	60
Liverpool, England	—	650
London, England	—	350
Manchester, England	—	6,100
Port Barrios, C. A.	—	2
Progreso, Mexico	—	1,342
Puerto, Mexico	—	1,360
Rotterdam, Holland	1,000	15,303
San Juan, P. R.	—	450
Tampico, Mexico	—	508
Vera Cruz, Mexico	—	2,212
Total	1,740	57,982
From Galveston—		
Antwerp, Belgium	—	200
Bremen, Germany	—	100
Havana, Cuba	—	611
Progreso, Cuba	—	200
Rotterdam, Holland	—	100
Tampico, Mexico	—	260
Vera Cruz, Mexico	—	100
Total	—	1,571
From Baltimore—		
Glasgow, Scotland	—	75
Havre, France	—	3,425
Liverpool, England	—	150
Rotterdam, Holland	—	50
Total	—	3,700
From Philadelphia—		
Christiania, Norway	—	104
Genoa, Italy	—	806
Total	—	910
From Savannah—		
Bergen, Norway	—	696
Christiania, Norway	—	1,215
Christiansand, Norway	—	183
Christiansund, Norway	—	122
Gothenberg, Sweden	—	333
Hamburg, Germany	—	3,654
Liverpool, England	—	729
London, England	—	2,226
Manchester, England	—	606

Rotterdam, Holland	—	33,587
Stavanger, Norway	—	273
Tonsberg, Norway	—	244
Tromso, Norway	—	135
Total	—	43,990
From Newport News—		
Christiania, Norway	—	100
Liverpool, England	—	125
London, England	—	136
Total	—	361
From Norfolk—		
Glasgow, Scotland	—	1,985
Hamburg, Germany	—	1,065
Liverpool, England	—	10,490
London, England	150	1,001
Rotterdam, Holland	50	3,086
Total	200	17,627
From San Francisco—		
Guatemala	—	3
Honduras	—	1
Hong Kong, China	—	2
Mexico	—	1
Nicaragua	—	1
Yokohama, Japan	—	13
Total	—	21
From Mobile—		
Buenos Aires, A. R.	—	2,238
Total	—	2,238
From all other ports—		
Canada	—	52,972
Mexico (including overland)	—	2,394
Total	—	55,366
Recapitulation—	Week ending May 28, Bbls.	Since Sept. 1, Bbls.
From New York	2,987	210,140
From New Orleans	1,740	57,982
From Galveston	—	1,571
From Baltimore	—	3,700
From Philadelphia	—	910
From Savannah	—	43,999
From Newport News	—	361
From Norfolk	200	17,627
From San Francisco	—	21
From Boston	—	947
From Mobile	—	2,238
From all other ports	—	55,366
Total	4,927	393,924

CRUSHERS' CONVENTION AFTERMATH.

Those who attended the 1914 convention of the Interstate Cotton Seed Crushers' Association at New Orleans will remember it as one of the most interesting meetings in the history of the organization. Unfortunately, owing to the shortcomings of the official stenographic force, some features of the report did not reach the public in such detail as was desired. Among these was the bright speech of President-elect Ives upon taking the chair after his election. He said:

Mr. President, Members of the Interstate Cotton Seed Crushers' Association, Ladies and Gentlemen:

Two years ago, as possibly some of you may remember, I was nominated as vice-president of this association. However, that nomination seemed to be rather previous, and my friend, Mr. Singleton, was elected, and has since served you in a most able and acceptable manner, as your vice-president and president.

Last year, at Chicago, when I was told that I was again to be nominated, one of my friends remarked that as a come-back, I was acquiring a reputation similar to that of a very distinguished citizen of Lincoln, Nebraska. But then and there the likeness ended, as in the past few months, I have several times been elected president of something or other, while our illustrious friend, as far as I know, is still looking up his presidential tree.

If he were in my shoes today, he would make you a speech, a great speech. That I cannot do, but I assure you that even to be President of the United States could give him no more pleasure than I now have in being chosen as the executive head of this honorable body. I feel that you have not only honored me, but the good old North State, from which I come, and, incidentally, the little wooden nutmeg State, which though having the honor of being my birthplace, had the misfortune of losing me in my tender infancy.

From the bottom of my heart I thank you for the compliment that you have paid me, and I hope I will be able to live up to the high standard of efficiency which has been set for me by my predecessors. I shall en-

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June 30, '06. Ser. No. 40,803**THE AMERICAN OIL TREATING AND HARDENING CO., CINCINNATI, OHIO, U. S. A.**

deavor to do all in my power toward the further upbuilding of this association, which has already done so much for our great industry, and I hope I can count upon the support and assistance of all its members toward making my administration a success.

I would like to suggest that during the coming year, we each of us make it our duty, and I feel sure it will also be our pleasure, to secure at least one new name for enrollment in our membership. This will not be difficult. During the past year I have talked with several men on the subject, who have readily given me their names for membership, and some of them have told me they would gladly have joined before, had they been invited. So you see the burden of hospitality is upon us. Let us hope that when we hold our next annual convention our membership may be doubled.

Upon his earnest request, and out of the kindness of my heart, I allowed a man named Cassells, who I understand was sent here from some very obscure spot in Alabama, to deliver an address to this association, on Monday, an address upon which I had devoted much care and thought. Instead of showing his gratitude at the opportunity given him of being seen and heard, I was much surprised and grieved to find that he took that opportunity to attempt to ridicule your president and vice-president. As a punishment for his lack of courtesy to your officers, I expect to punish that old gentleman by appointing him a member of all committees of this association requiring much hard labor. Hereafter I intend to deliver all my speeches in person, and not by proxy.

Another feature of the proceedings, in connection with the adoption of resolutions in memory of Col. J. J. Caffrey, of Louisville, was the tribute contained in the following letter from Chicago:

Chicago, May 16, 1914.

Robert Gibson, Secretary,

Interstate Cotton Seed Crushers' Association, New Orleans, La.

Dear Sir:—I regret very much that I cannot be with you at this convention, having quite a few very good business friends in New Orleans. I liked very much to be there, but my business interests here will not allow me to get away at present; however, I shall be with you in thought and wish you all a very successful and pleasant convention.

There is another splendid man missing at this convention, our dear friend, Mr. J. J. Caffrey, the late president of the Louisville Cotton Oil Company, who has gone into the great unknown, and I should be remiss if, especially at this time, I would not express my feelings. Having had many years of close business relations with Mr. J. J. Caffrey, I desire to say to you all, as members of the Interstate Cotton Seed Crushers' Association, that we have lost in Mr. Caffrey a true and splendid business man, who always had the interests of the cotton seed oil industry at heart, and was at all times a generous and loving friend to all.

Few men in business regarded the word of honor so highly as did Mr. J. J. Caffrey; he was generous in all his dealings, and was honored and respected for it by all his friends and business associates. Being true to himself, Mr. J. J. Caffrey was always true to his fellow man, and while he is gone now, he is not forgotten, but he leaves behind him the most tender memories.

My dear Mr. Gibson: If you will read these few remarks at the proper time before the convention, I shall appreciate it, as I desire the members to know that we appreciate good men and love to deal with them and value honorable dealings higher than all money considerations.

With best respects to you all, I am,

Respectfully yours,
The Fred C. Adams Company,
Fred C. Adams, President.

Bargains in equipment may be obtained by watching the "For Sale" department, page 48.

COTTONSEED MEAL DIGESTION EXPERIMENTS

Value of Cottonseed Flour As a Human Food

By Dr. G. S. Fraps, Texas State Chemist, and J. B. Rather, Assistant Chemist.

(Continued from last week.)

Digestibility of Cottonseed Flour Compared With Meat.

Three digestion experiments were made with men with ordinary cottonseed meal, and two with a specially prepared cottonseed flour. In order to compare the digestibility of the meal with that of meat, two experiments were made on a canned meat product known as chicken loaf. Analysis showed that the meat contained a considerable amount of some cereal, but this apparently did not affect the digestibility of the protein and fat.

The cottonseed meal used in this work was fresh meal from fresh seed. It was slightly below the average quality and was not very finely ground. It was sifted through a 20-mesh sieve. The residue (30 per cent.), consisting of hulls and unground cake, was rejected.

The cottonseed flour used was made from prime meal and was an almost impalpable powder. The meal had been put through a roller mill, according to the manufacturer's statement. It was practically free from hulls.

Method of Conducting Digestion Experiments.

Each experiment was two days (six meals) in length. A simple mixed diet was fed. It consisted of milk, corn bread and meat, in the meat experiments, and of milk, butter and cottonseed meal-corn bread in the cottonseed meal and flour experiments. The food was eaten *ad libitum* with the exception of the meat, 300 grams of which was fed daily. The food offered each subject was weighed before and after each meal and the amount eaten determined. Samples were taken from each loaf of bread and each box of chicken loaf.

The health of all the subjects continued good through the experiments. One experiment, however, on man No. 3 had to be thrown out on account of constipation.

Formulas for the Bread Used in Tests.

The breads were made according to the following formulas:

Corn bread used in Experiment No. 1, Period 1.

Corn meal 400 gm.
Salt 25 gm.
Water.....A sufficient quantity.

Cottonseed meal-corn bread, Experiment No. 1, Period 2.

Corn meal 160 gm.
Cottonseed meal 80 gm.

Salt 10 gm.
Water.....A sufficient quantity.
Corn bread used in Experiment No. 2, Period 1.

Corn meal 485 gm.
Salt 15 gm.
Water.....A sufficient quantity.

Cottonseed meal-corn bread used in Experiment No. 2, Period 2, and in Experiment No. 3.

Corn meal 190 gm.
Cottonseed meal or flour..... 50 gm.
Salt 10 gm.
Water.....A sufficient quantity.

The ingredients were accurately weighed out and well mixed. Sufficient boiling water was added to moisten the mass, and was thoroughly worked in with a spoon. The mixture was spread out in a cake in a hot skillet which had been greased slightly with a cloth dipped in melted lard, and baked on both sides. Great care was taken to cook the bread thoroughly. In the first experiment sufficient bread was cooked to last through the entire period, but in all others bread was cooked and served hot with each meal.

The analyses of the products and the calculations were conducted in the usual manner, but the following points should be mentioned. All fats in the breads were calculated from the fat content of the ingredients. This was done because it is known that fat is rendered to some extent insoluble in ether by cooking.

The per cent. of corn meal in the water-free cottonseed corn-meal mixture was taken as the per cent. of corn meal in the water-free bread. The number of grams of the nutrients in the corn meal portion of the water-free bread fed was subtracted from the total nutrients, calculated from analyses of the bread, and the remainder taken as nutrients fed as cottonseed meal.

The following coefficients of digestibility were assumed in making these calculations: for milk, protein, 97 per cent.; fat, 95 per cent.; carbohydrates, 98 per cent.; for butter, fat, 95 per cent.; and for corn meal, protein, 85 per cent.; fat, 90 per cent.; and carbohydrates, 98 per cent. These results are the averages by Atwater of the results of a large number of digestion experiments.

While these figures may not be exactly correct in the foods used by us, the results with cottonseed meal and with meat are directly comparable, since the above factors were assumed for both calculations. The results are shown in Table 2.

(To be continued.)

Table No. 2.—Percentage of Nutrients Digested, Cottonseed Meal and Meat.

Man No.	Protein.	Fat.	Carbo-hydrates.	Carbo-hydrates and fats.	Carbo-hydrates when fats are assumed 95% digested.
1 Canned chicken loaf	93.3	100.0	...	...	...
2 Canned chicken loaf	93.9	99.3	...	...	...
1 Cottonseed meal	80.2	100.0	58.7	79.0	78.4
2 Cottonseed meal	74.7	100.0	25.5	58.8	48.0
3 Cottonseed meal	77.9	100.0	51.2	72.3	65.4
1 Cottonseed flour	79.7	100.0	49.0	70.1	61.2
2 Cottonseed flour	79.2	100.0	68.7	85.8	79.4
Average for meat	96.6	99.7	...	...	...
Average for cottonseed meal	77.6	100.0	44.5	70.1	65.9
Average for cottonseed flour	79.5	100.0	58.0	78.0	70.3
Average digestibility of cereals	83.	90.	98.	...	...
Average digestibility of legumes	78.	90.	97.	...	...
Cottonseed meal digested by dogs (Mendel and Fine)	71.6	...	...	...	...
Cottonseed meal digested by animals (ruminants)	88.4	93.3	60.6	...	...
Total food of average mixed diet (Atwater).....	92.	95.	98.	...	...

HIDES AND SKINS

(DAILY HIDE AND LEATHER MARKET)

Chicago.

PACKER HIDES.—The market continues strong on native kinds, and steady and unchanged to firm on branded selections. The demand for native cows has been good, and it is understood a packer has made a clearance of June to September all weights ahead at full former prices, and with details not given as yet as to quantities moved this is the only new trading noted, and the general opinion is that the market will likely rule quiet balance of the week with Saturday a holiday. Some say that it looks as though tanners needing hides had filled requirements. Native steers are without further movement. Prices range according to salting and average weight, with premiums readily paid for light average which continue in chief request. April salting are ranged $18\frac{1}{4}$ @ $18\frac{1}{2}$ c., whether early Aprils, Aprils alone or included with Mays, while May takeoff ranges $18\frac{1}{2}$ @ $18\frac{3}{4}$ c., the inside price last realized in conjunction with Aprils. May salting alone is quoted at $18\frac{3}{4}$ c. last paid and firmly held at that figure. Late Mays are held in some instances at 19c. Texas steers are firm with the packers reporting that they will not sell under $19\frac{1}{4}$ c., $18\frac{3}{4}$ c. and $18\frac{1}{2}$ c., respectively, for the three weights of late May salting, with last trading in Mays at 19c. for heavy and $18\frac{3}{4}$ c. for lights and extremes together. Packers will sell at $18\frac{3}{4}$ c. for lights and extremes together, but for lights alone demand $18\frac{3}{4}$ c. Bids of 19c. have been declined for last half of May heavy weights. Butt brands continue nominal at 18c. for Mays, the last selling price, but along with Colorados are the slow end of the present market. Earlier salting is obtainable $\frac{1}{4}$ @ $\frac{1}{2}$ c. less. Colorados continue quiet and in the same position as butt brands, with Mays nominal at $17\frac{3}{4}$ c. last paid, and earlier salting $\frac{1}{4}$ @ $\frac{1}{2}$ c. less as to dates of takeoff. Branded cows are steady and unchanged at $18\frac{1}{4}$ @ $18\frac{1}{2}$ c., as to salting, points of kill, etc., and sales regularly made keep these well cleaned up right along. Last business was at these figures as noted earlier in the week. Native cows are strong but unchanged and in continued demand. Although some of the packers said they were declining to sell further ahead on the active inquiry for June forward salting a packer is understood to have sold all weights June-July-August-September ahead at the former full rates of 19c. for lights and $18\frac{1}{2}$ c. for heavies. Packers have been asking $18\frac{1}{4}$ @ $18\frac{1}{2}$ c. for April heavies and some $18\frac{3}{4}$ @ 19 c. for Mays, but as based on the above sale the market for late and forward salting is $18\frac{1}{2}$ c. Native bulls are still slow at $15\frac{1}{2}$ c. for January-February-March and 16c. for April-May-June. Branded bulls are now hardly quotable over $14\frac{1}{2}$ c. for Northern and 15c. for Southern kill, as based on the recent sale of Kansas City-Fort Worth at 15c.

COUNTRY HIDES.—There is no change in quotations with trade generally quiet, but the market steady to firm and dealers generally feeling strong on late receipt lots. Some buyers are claiming the market is not quite so strong, probably in the absence of fresh trading of account, but there are re-

ports of good quality regular buffs and extremes bringing full prices. Back salting are available at the usual recessions obtainable at this time of the year, but some of the dealers are talking they will not accept prices talked by buyers, probably with a view to mixing these in with later receipts. Buffs are reported to have sold to the extent of a car of good regular quality at the full price of 16c., and the sale was made by a dealer who is supposed to have included first half of May receipts, Chicago freight, indicating that good quality brings steady prices. Buyers report no difficulty at all in securing back lots at $15\frac{3}{4}$ c., with proportionately lower rates on heavy cows and extremes, but some of the dealers are talking they do not want to sell at these prices. They generally talk around $\frac{1}{4}$ c. higher, but the market is no better than 16c. for good lots, with some asking more and "specials" held as high as $16\frac{1}{2}$ c. Heavy cows range $15\frac{1}{2}$ @ 16 c. asked. Some dealers talk that they do not want to sell back lots at $15\frac{1}{2}$ c. with recent business in 50-lb. and up late receipts at $15\frac{3}{4}$ c. Extremes range $16\frac{1}{2}$ @ $17\frac{1}{4}$ c. asked, as to salting, quality, etc., with good lots scarce, firm and in continued demand. The dealer selling the buffs noted above also sold a car of extremes at 17c.; $17\frac{1}{4}$ c. is generally asked, and "specials" held up to $17\frac{1}{2}$ c. Heavy steers are unchanged at $15\frac{3}{4}$ @ 16 c. Bulls. $13\frac{1}{2}$ @ $14\frac{1}{4}$ c. asked.

Later.—There is a report of two cars of current receipt extremes selling at 17c., but no other business is noted.

CALFSKINS.—The tendency generally keeps easy, although lots from certain sections bring unchanged prices as noticeable in the sale of mixed outside cities and countries, 75 per cent. the former, at $19\frac{1}{2}$ c. Some consider this a lower price for these, but buyers' ideas on Chicago cities are as low as $19\frac{1}{2}$ c. Chicago cities range 20 @ $20\frac{1}{4}$ c., as to quality. Packer calf 21c. last paid for June skins, outside cities $19\frac{1}{2}$ @ 20 c., and countries $18\frac{1}{2}$ @ 19 c. Kips quiet unchanged.

SHEEPSKINS.—Shearlings of packer take-off are in good demand with recent business at 50c., as they run, and up to $52\frac{1}{2}$ c. for this week's takeoff. Up to 55c. is generally asked. Lambs are held from 70@80c., as the wool is increasing, and country shearlings held 25@35c.

New York.

DRY HIDES.—Negotiations are still reported in progress on common varieties, but no trading is confirmed, and the situation is nominally unchanged. The receipts of late have been moderate, and there is not much available to offer. Some fresh arrivals, however, include 4,219 Puerto Cabellos, etc., per the "Philadelphia," and 233 Central Americans, etc., per the "Colon." No sales are confirmed of sizable lots of River Plates, although it is reported that some small lots of 1,000 or so each of Buenos Ayres are being moved. Asking prices range from $28\frac{1}{2}$ c. for regular weight Buenos Aires 70 per cent. half hair, and up to $28\frac{3}{4}$ c. for 90 per cent. half hair and up, and the position of the market appears to be rather easy, as some

bids of $28\frac{1}{4}$ c. are reported solicited on the $28\frac{1}{2}$ c. offerings.

WET SALTED HIDES.—No further trading is noted in River Plate frigorificos with the exception of a lot of 2,000 La Plata cows of 20 kilos which are reported to have brought 18 5-16c. Offerings on the market include 4,000 La Plata steers at $18\frac{1}{4}$ c., 2,000 La Plata cows at 18 5-16c., 4,000 Sansinena steers at $18\frac{1}{4}$ c., 1,000 Sansinena cows at 18 7-16c., 3,000 Las Palmas steers at $18\frac{1}{4}$ c., and 4,000 Argentine steers at 17 11-16c. No trading is noted in Mexicans, and prices on these are nominally unchanged. Some lots of Mexicans are coming here via Havana. One sale has been made of a small lot of about 200 heavy weight Cubans of 65 lbs. average at 14c. These were previously noted as offered at 15c., but the market on heavy hides is especially easy, and it is hard to sell these except at quite a reduction under lights. Regular 40@45-lb. Santiago Cubans are held at $16\frac{1}{4}$ c., but unsold as yet.

CITY PACKER HIDES.—Spreadies are again receiving attention, and two of the packers are reported to have cleaned out their holdings of winter and spring stock running from January 1 to June 1. One of the packers sold about eight cars, and the other about five cars, making about thirteen cars in all, but the price secured has not as yet been confirmed, and although it is believed that not over 18c. and probably a trifle less than this was the selling rate, no authoritative price can be given. No further sales are noted of regular native or branded steers. One packer is reported to have refused a bid of 15c. for a car or so of native bulls running to January 1 to June 1 salting.

COUNTRY HIDES.—There continues to be a fair demand for late receipt hides, and prices hold steady on the basis of 16c. for buffs. One sale was recently made here of 2,500@3,000 eastern Pennsylvania late receipt buffs at 16c., and while buyers are willing to pay this figure they are not accepting offerings of Pennsylvania, Ohio and other Middle West buffs at $16\frac{1}{4}$ c., although some dealers are not willing to sell under this. There are some offerings here, however, of car lots of all No. 2 Ohio buffs at 15c., and a car of heavy cows dating back in salting, 60 lbs. and up, is offered from an Ohio point at $15\frac{3}{4}$ c. and not sold. A car of all late receipt Pennsylvania buffs running only 25 per cent. No. 2s and all stuck throats sold at $15\frac{3}{4}$ c. flat. On car lots of New York State 25-lb. and up hides buyers' views are top at $15\frac{1}{2}$ c. flat, as they figure most lots of these hides to run 60@70 per cent. No. 2s. Some small lots of New England 100@300 each sold $15\frac{1}{4}$ c. flat.

CALFSKINS.—The market does not show any further change, but the demand is still moderate and buyers are low in their views. There are so many offerings here from all sections, and especially from the West, that buyers can choose from a good many different lots such quantities as they are disposed to buy. Some New York Cities are reported offered at \$1.70, \$2.25 and \$2.60, and the market is rather nominal with no sales noted. One little lot of about 1,000 country skins sold from an eastern Pennsylvania point at \$1.27 $\frac{1}{2}$, \$1.95 and \$2.25 flat.

European.

One cable on a recent Paris auction states that prices were unchanged on light and medium calfskins and 3 per cent. lower on the extra heavies. This drop on the heavies is probably because last month they brought high rates; selling almost up to light weights.

Chicago Section

Teddy is sure a Bear for work.

The dead ones seem to be getting more popular, or notorious, than heretofore.

It would seem railroads have other interests than that of merely killing people.

Charley Sterne and Jack Hall are back from Nu Awlyuns. Lots of business, as usual!

The International Live Stock Exposition officials are getting busy on this year's "biggest show on earth."

And the brick war goes merrily on, with 17,000,000 brick lying idle, to say nothing of about 200,000 men also.

Miss Helen Morton is giving the Colonel a run for that front page stuff, but it takes stamina to stick in the race.

A consensus of opinion places business as good, bad and indifferent, according to liver conditions or political beliefs.

Chicago is to have 150 new street cars. That will help some, provided 150 old ones are not sold to some other town.

Yep! He's around—the guy who asks, "Is it hot enough fer yuh?" It will never be hot enough for him, if we have our wish!

Brevity, thy name is women's summer duds! Sockless Jerry Simpson had no idea he was destined to set a fashion for women.

How old must a man be before he's out of the running, Uncle Joe? "Search me!" says Uncle Joe, "you'll have to ask an older man than me!"

Uncle Joe Cannon is listed as a possible come-back. T. R. has already qualified as a C. B.—from South America, where the wet, wet rivers flow.

Huerta ought to be thankful he hasn't the Pankhurst gang on his trail. He'd have been tearing the callouses off'n his hoofs hittin' the pike before this!

Swift & Company's sales of fresh beef in Chicago for the week ending Saturday, May 23, 1914, averaged as follows: Domestic beef, 11.91 cents per pound.

Talk is cheap—not! Sass a judge, hire a lawyer, approach W. J. B. on a Chautauqua spiel, or Billy Sunday on a tongue-lashing of the devil, and—change your opinion!

This crop expert thing is becoming quite a factor in the grain business. Successful crop experting requires tact, and a conscience good as new—that is, never been used!

Old man Huerta seems to be still able to sit up and take no notice, but a little nourishment, nevertheless. Pretty good standpatter; liable to get panicky any minute, though.

Not long ago, referring to that "long time dead" thing, we remarked, "You seldom hear any one speak of J. P. Morgan since his demise." We take it all back. 'Tis a great age we are living in.

It is reported that Armour & Company will engage in the manufacture of hog cholera serum in their Kansas City plant. As Armour & Company usually do things right, this presages the beginning of the end of hog cholera.

To read in the newspapers about Col. Roosevelt "snapping his jaws," "gritting his teeth," etc. (so far they haven't had him "champing at the bit," or "frothing at the mouth"), it might be supposed the reporters were writing of some wild animal, or ferocious domestic one, instead of a gentleman and a scholar.

WORK FOR MARKETING REFORM.

What has the Federal Government's latest organization dealing with problems of distribution and marketing investigations accomplished, and, what is its outlook? Designated as the Office of Markets of the Department of Agriculture, this newest branch of Federal activity was formed only a year ago. Its primary purpose is to ascertain and make known the most effective and economical methods for properly distributing and marketing farm products.

To meet the need for information and guidance along this line Congress last year authorized Secretary Houston of the Department of Agriculture to spend \$50,000 in acquiring and distributing useful information regarding the marketing and distribution of farm products. An additional sum of \$25,000 was also available for cotton handling and marketing work. This provided the chief of the new bureau, Charles J. Brand, with a fund of \$75,000 for his first year's attack on these problems.

The results accomplished during the preliminary organization year of distribution and marketing investigations so pleased the members of the House Committee on Agriculture that the current Agricultural Appropriation bill was reported with an item of \$200,000 for the second year of the new bureau.

The committee took the position that the Federal Government, which had confined its efforts largely to problems of production, should now attack the problem of distribution and marketing with as much vigor as would be consistent with good judgment and the securing of effective and substantial results.

The principal lines of investigation undertaken by the Office of Markets during its first year have been:

First—Co-operative production and marketing.

Second—Market surveys, methods and costs.

Third—Market grades and standards.

Fourth—City marketing and distribution.

Fifth—Transportation of farm produce.

Sixth—Storage problems.

Seventh—Marketing miscellaneous products and collaboration.

Eighth—Marketing by parcel post.

Ninth—Cotton handling and marketing.

Explaining the outlook for the future to a representative of the New York Times Annalist, Mr. Brand, the chief of the bureau, said that the new work to be taken up during the next few months would include an investigation into the marketing of butter, cheese and milk, especially in Minnesota and Wisconsin, and in portions of adjacent States, to be studied as a regional problem.

Another new line of work to be commenced almost immediately is to be the marketing of livestock and meats. Still another question to be attacked is the feasibility of establishing a market news service which would supply quick information regarding available supplies in production areas and the demand in consuming centres.

"There are limitations to the use of parcel post for direct marketing," says Chief Brand. "Its greatest field of use will be locally or within the first and second zones. The postage rates beyond the second zone increase so that shipments as a rule could not be made economically. There is quite a field of opportunity within which the parcel post can

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Provision Department

MORRIS & COMPANY

CHICAGO
U. S. YARDS

be made to supplement the ordinary methods of transportation and marketing to the benefit and satisfaction of both producer and consumer."

Chief Brand classifies students of marketing problems into three classes—pessimists, optimists and rationalists.

"We are trying to be rationalists," he said: "trying to get and understand the point of view of every legitimate interest and to adjust them with fairness to all. Our duty is to acquire by every possible means and to diffuse information. We hear a great deal about the middleman. Many seem to feel no system of marketing is correct in principle that does not involve a general attack upon and ultimate annihilation of all intermediary agents between producer and consumer. Without doubt there are altogether too many middlemen, but it is extremely doubtful if it will ever be able to evolve a marketing system that will completely eliminate the class.

"The Office of Markets recognizes no fight upon any person or set of persons. It is true we have commenced a warfare, but it is a fight against waste! The only item to which we give credit is service, efficient service! Whenever the farmer discovers that he, as an individual or acting in harmony with neighbors, can perform with less expense or greater efficiency some work he now delegates to the middleman, it is his duty to do that work, and that middleman will be eliminated by the general rule of the survival of the fittest. It is purely a problem of efficiency and elimination of waste.

"While manufacturers, bankers, real estate dealers, railroads, great financial leaders, and

the Federal Government itself are anxious to aid in trying to solve unhealthy market conditions, it must be apparent that in the main the solution of the farmer's problems must rest with the farmer himself. The farmers of America neither ask for charity, nor have they a right to ask for anything more than an equal chance and a square deal. The success of their efforts depends upon their intelligence, their business ability, and the loyalty they display in their efforts to co-operate with their neighbors in eliminating waste. It is to this movement that the Office of Markets hopes to be able to afford an intelligent, rational and enthusiastic support."

The new bureau is emphasizing the importance of co-operative production and marketing. Chief Brand insists that the community should be organized for the efficient conduct of both its producing and marketing work; that small farmers, producing less than earload lots in any community, could not hope to pack, crate, transport and sell to advantage. On a community basis the new bureau is urging farmers to adopt methods of action for co-operative production and marketing.

The market surveys of the new bureau embrace an inquiry into available market supplies in production areas and demand at consuming centres, quantities of produce in cellar, cold and other storage, marketing systems and prices, commission, brokerage, auction and other methods of marketing agricultural products, the effect upon the producer of produce exchange prices and other quotations, and of future dealings; also the costs and increases in price involved in changes of ownership in wholesale and retail distribution.

THE EVOLUTION OF DRY SAUSAGE. (Concluded from page 16.)

Likewise on board ship (the purchases being made by ship chandlers in the coast towns); in the harvest field and by all the commissaries it is appreciated for its compact form and other attributes. In fact, in Continental Europe the popular sandwich at restaurants, lunch rooms and railroad depots, has a delicious Salami or Cervelat filler.

To sum up its qualities in a few words, it is a genuine relish, good all through, and the same all through.

How to Serve This Sausage.

To get the best results and appreciation of dry sausage it should be sliced thin, and obliquely, removing the casing before serving. Then one has a delicious and appetizing meal in a twinkling. One would never dream of slicing dried beef excepting in thin wafer-like slices, so why otherwise with dry sausage? It is always well to use a sharp knife.

Many prepared foods require additional touches before serving, such as heating, or adding a sauce; but dry sausage requires only slicing and serving, and is as much a delight to the eye as it is a relish to the palate.

Many emergency repasts consist of meat substitutes. This, on the contrary, is meat, the real thing, and it conveys no suggestion whatever of the "hurry-up" meal. No recipes are necessary for dry sausage, as it is a treat in itself without any adornment or garnishments to accompany the platter to the table.

Mould does not harm sausage unless it is allowed to penetrate the casing. In the event of a mould forming on the outside the sausage must be wiped with a damp cloth or washed and hung in a cool, dry place.

So sure are we of our product, and so deep is our faith, that we can turn complaints into sales, if the opportunity is afforded. Complaints come, as a rule, from new salesmen who have not acquired the knowledge to counteract the complaint.

CHICAGO LIVE STOCK

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, May 18	21,200	1,147	22,900	18,617
Tuesday, May 19	2,278	5,411	10,600	20,132
Wednesday, May 20	13,508	2,025	23,049	23,542
Thursday, May 21	3,134	1,981	17,911	12,650
Friday, May 22	1,477	463	17,200	10,600
Saturday, May 23	200	10	12,000	3,600
Total this week	41,797	11,637	109,705	88,607
Previous week	38,290	10,619	111,337	84,572
Cor. time, 1913	40,119	9,263	133,900	84,246
Cor. time, 1912	39,966	11,102	141,139	74,955

SHIPMENTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, May 18	5,714	6	7,108	4,747
Tuesday, May 19	1,438		2,822	2,515
Wednesday, May 20	4,114	26	2,736	1,368
Thursday, May 21	3,132	47	472	3,654
Friday, May 22	1,105	4	2,369	225
Saturday, May 23	100		2,000	600
Total this week	15,623	93	17,507	13,000
Previous week	15,505	42	18,079	21,007
Cor. week, 1913	15,600	194	17,052	9,032
Cor. time, 1912	12,515	158	22,641	8,260

CHICAGO TOTAL RECEIPTS LIVESTOCK.

	Cattle.	Hogs.	Sheep.
Year to May 23, 1914	502,670	2,700,530	2,071,172
Same period, 1913	547,061	2,988,485	1,762,308

Combined receipts of hogs at eleven points:

Week ending May 23, 1914	473,000
Previous week	424,000
Cor. week, 1913	501,000
Cor. week, 1912	478,000
Total year to date	5,415,000
Same period, 1913	5,872,000

Receipts at six points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City) as follows:

	Cattle.	Hogs.	Sheep.
Week to May 23, 1914	97,700	342,300	201,000
Week ago	92,400	305,800	217,300
Year ago	112,700	383,500	175,900
Two years ago	103,400	383,000	159,500

Combined receipts at six markets for 1914 to date and same period a year ago:

	1914.	1913.
Cattle	2,248,000	2,500,000
Hogs	8,896,000	7,449,000
Sheep	4,641,000	4,087,000

CHICAGO PACKERS' HOG SLAUGHTER.

	1914.	1913.
Week ending May 23, 1914:		
Armour & Co.	18,600	
Swift & Co.	11,600	
S. & S. Co.	9,900	
Morris & Co.	7,300	
Anglo-American	4,800	
Hammond & Co.	8,300	
Boyd-Linham	4,200	
Western P. Co.	6,800	
Roberts & Oake	3,000	
Miller & Hart	3,000	
Independent P. Co.	6,000	
Brennan P. Co.	4,400	
Others	1,400	
Totals	99,300	
Previous week	90,500	
1913	83,500	
1912	112,600	
Total year to date	1,928,900	
Same period last year	2,261,000	

WEEKLY AVERAGE PRICE OF LIVE STOCK.

	Cattle.	Hogs.	Sheep.	Lambs.
This week	\$8.50	\$8.50	\$5.55	\$8.30
Previous week	8.60	8.40	5.75	8.20
Cor. week, 1913	8.10	8.60	5.65	7.35
Cor. week, 1912	8.25	7.70	5.45	6.20
Cor. week, 1911	5.05	5.50	4.75	6.80

CATTLE.

Steers, good to choice heavy	\$8.50@9.25
Steers, fair to good	7.65@8.60
Yearlings, good to choice	8.50@9.15
Inferior steers	7.25@7.85
Stockers	6.00@7.40
Feeding steers	7.40@8.25
Medium to good beef cows	5.00@5.60
Stock cows	5.00@5.40

Fair to choice heifers	7.25@8.75
Stock heifers	6.00@7.00
Good to choice cows	6.25@7.40
Common to good cutters	4.40@5.00
Butcher bulls	6.75@7.50
Bologna bulls	6.25@6.70
Good to choice calves	10.00@10.50
Heavy	7.50@9.50

HOGS.

Choice light, 170 to 195 lbs.	\$8.25@8.35
Light mixed, 170 to 200 lbs.	8.20@8.30
Prime light butchers, 200 to 230 lbs.	8.20@8.35
Prime weight butchers, 230 to 270 lbs.	8.20@8.30
Prime heavy butchers, 270 to 300 lbs.	8.20@8.30
Mixed packing	8.15@8.25
Heavy packing	8.15@8.25
Pigs	7.75@8.25
Boars	3.00@8.40
*Stags	8.65@9.00

*All stags subject to 80 lbs. dockage.

SHEEP.

Colorado wool lambs	\$9.00@9.15
Western fed lambs	8.00@8.10
Clipped lambs	7.65@8.50
Clipped ewes	5.00@5.50
Clipped wethers	5.75@6.00
Clipped yearlings	6.25@7.00
Feeding lambs	6.75@7.00
Spring lambs	7.50@7.65

CHICAGO PROVISION MARKET

Range of Prices.

SATURDAY, MAY 23, 1914.

	Open.	High.	Low.	Close.
PORK—(Per bbl.)—				
May	\$.....	\$.....	\$.....	\$19.00
July	20.10	20.10	20.05	20.10
September	19.85	19.80	19.85	19.80
LARD—(Per 100 lbs.)—				
May	.....	.....	.....	19.05
July	10.02½	10.05	10.02½	10.05
September	10.20	10.20	10.17½	10.20
RIBS—(Boxed, 25c. more than loose)—				
May	.....	.....	.....	11.20
July	11.22½	11.27½	11.22½	11.25
September	11.30	11.35	11.30	11.35

MONDAY, MAY 25, 1914.

PORK—(Per bbl.)—				
May	19.82½	19.95	19.82½	19.95
July	20.00	20.17½	20.00	20.14
September	19.85	19.85	19.77	19.82½
LARD—(Per 100 lbs.)—				
May	9.82½	9.82½	9.82½	9.82½
July	10.00	10.00	9.87½	9.87½
September	10.15	10.15	10.05	10.05
RIBS—(Boxed, 25c. more than loose)—				
May	11.15	11.15	11.15	11.15
July	11.20	11.25	11.20	11.20
September	11.32½	11.32½	11.30	11.30

TUESDAY, MAY 26, 1914.

PORK—(Per bbl.)—				
May	.....	.....	.....	19.82½
July	20.12½	20.17½	19.92½	20.14
September	19.75	19.80	19.65	19.67½
LARD—(Per 100 lbs.)—				
May	.....	.....	.....	19.70
July	9.82½	9.85	9.75	9.75
September	10.02½	10.02½	9.90	9.90
RIBS—(Boxed, 25c. more than loose)—				
May	11.12½	11.15	11.07½	11.07½
July	11.17½	11.20	11.10	11.10
September	11.22½	11.27½	11.17½	11.17½

WEDNESDAY, MAY 27, 1914.

PORK—(Per bbl.)—				
May	.....	.....	.....	19.95
July	20.00	20.07½	19.97½	20.05
September	19.70	19.80	19.70	19.80
LARD—(Per 100 lbs.)—				
May	9.70	9.72½	9.70	9.72½
July	9.77½	9.82½	9.77½	9.80
September	9.92½	10.00	9.92½	9.97½
RIBS—(Boxed, 25c. more than loose)—				
May	.....	.....	.....	11.15
July	11.12½	11.20	11.12½	11.20
September	11.17½	11.27½	11.17½	11.27½

THURSDAY, MAY 28, 1914.

PORK—(Per bbl.)—				
May	.....	.....	.....	19.70
July	20.05	20.05	19.75	19.82½
September	19.77½	19.77½	19.65	19.67½
LARD—(Per 100 lbs.)—				
May	9.72½	9.72½	9.62½	9.62½
July	9.80	9.80	9.72½	9.72½
September	9.97½	9.97½	9.87½	9.87½
RIBS—(Boxed, 25c. more than loose)—				
May	11.17½	11.17½	11.10	11.10
July	11.17½	11.17½	11.05	11.10
September	11.25	11.25	11.12½	11.17½

FRIDAY, MAY 29, 1914.

PORK—(Per bbl.)—				
May	19.02½	19.02½	19.52½	19.52½
July	19.80	19.82½	19.72½	19.72½
September	19.60	19.70	19.60	19.62½
LARD—(Per 100 lbs.)—				
May	9.62½	9.62½	9.62½	9.62½
July	9.67½	9.67½	9.67½	9.70
September	9.87½	9.87½	9.85	9.87½
RIBS—(Boxed, 25c. more than loose)—				
May	11.10	11.10	10.92½	10.97½
July	11.07½	11.10	11.02½	11.05
September	11.15	11.15	11.10	11.12½

†Bld. †Asked.

CHICAGO RETAIL FRESH MEATS.

(Corrected weekly by Pollack Bros., 41st and Halsted Streets.)

Beef.

Native Rib Roast	20	@25
Native Sirloin Steaks	22	@25
Native Porterhouse Steaks	25	@32
Native Pot Roasts	15	@18
Rib Roasts from light cattle	13	@17
Beef Stew	12	@14
Boneless Corned Briskets, Native		@16
Corned Rumps, Native		@12½
Corned Ribs		@10
Corned Flanks		@18
Round Steaks	18	@23
Round Roasts	15	@18
Shoulder Steaks	17	@17
Shoulder Roasts	15	@16
Shoulder Neck End, Trimmed		@12½
Rollad Roast	16	@18

Lamb.

Hind Quarters, fancy	20	@22
Fore Quarters, fancy	14	@15
Legs, fancy	22	@24
Stew		@12½
Chops, shoulder, per lb.		@16
Chops, rib and loin, per lb.		@30
Chops, French, each		@15

Mutton.

Legs	16	@18
Stew	8	@10
Shoulders		@12
Hind Quarters		@15
Fore Quarters		@11
Rib and Loin Chops	18	@20
Shoulder Chops	14	@16

Pork.

Pork Loin	16	@18
Pork Chops	20	@20
Pork Shoulders		@15
Pork Tenders	38	@40
Pork Butts		@16
Spare Ribs		@14
Hocks		@11
Pigs' Heads		@8
Leaf Lard		@12½

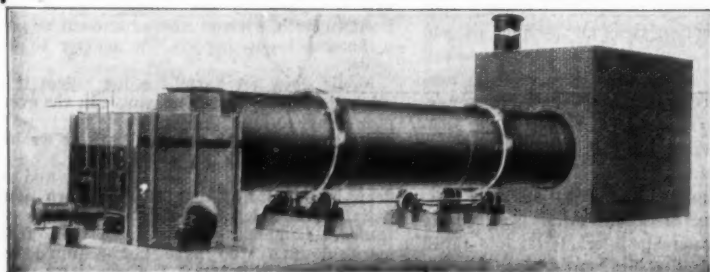
Veal.

Hind Quarters	18	@22
Fore Quarters	12½	@14
Legs	18	@22
Breasts		@16
Shoulders	10	@18
Cutlets		@35
Rib and Loin Chops		@25

Butchers' Offal.

Suet		@7
Fallow		@3%
Bones, per cwt.		@1.00
Calfskins, 8 to 15 lbs.		@18
Calfskins, under 8 lbs. (deerskins)		@65
Kills		@15

DRYERS AND CONTINUOUS PRESSES



Economical Efficient Great Capacity

SAVING IN LABOR ALONE IN ONE YEAR WILL OFFSET COST TO INSTALL

For Tankage, Blood, Bone, Fertilizer, all Animal and Vegetable Matter. Installed in the largest packing-houses, fertilizer and fish reduction plants in the world.

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American Process Co.
68 William St., - - New York

CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

Prime native steers	13 1/4	@ 14
Good native steers	13	@ 13 1/4
Native steers, medium	13	@ 13 1/4
Heifers, good	13	@ 13 1/4
Cows	12	@ 12 1/2
Hind Quarters, choice	16	@ 16
Fore Quarters, choice	11 1/4	@ 11 1/4

Beef Cuts.

Cow Chunks	9 1/4	@ 10 1/4
Steer Chunks	11 1/4	@ 11 1/4
Boneless Chunks	12 1/4	@ 12 1/4
Medium Plates	8 1/4	@ 8 1/4
Steer Plates	9 1/4	@ 9 1/4
Cow Rounds	11 1/4	@ 11 1/4
Steer Rounds	13 1/4	@ 13 1/4
Cow Loins	14	@ 14
Steer Loins, Heavy	20 1/2	@ 20 1/2
Beef Tenderloins, No. 1	25	@ 25
Beef Tenderloins, No. 2	23	@ 23
Strip Loins	13	@ 13
Sirloin Butts	16	@ 16
Shoulder Clods	13 1/4	@ 13 1/4
Rolls	15 1/4	@ 15 1/4
Rump Butts	13	@ 13
Trimnings	10 1/4	@ 10 1/4
Shank	7 1/4	@ 7 1/4
Cow Ribs, Common, Light	11 1/4	@ 11 1/4
Cow Ribs, Heavy	14	@ 14
Steer Ribs, Light	16	@ 16
Steer Ribs, Heavy	16 1/4	@ 16 1/4
Loins Ends, steer, native	16	@ 16
Loins Ends, cow	14 1/4	@ 14 1/4
Hanging Tenderloins	12	@ 12
Flank Steak	14 1/4	@ 14 1/4
Hind Shanks	5 1/4	@ 5 1/4

Beef Offal.

Brains, per lb.	8	@ 8
Hearts	9	@ 9
Tongues	17	@ 17
Sweetbreads	25	@ 25
Ox Tail, per lb.	8 1/4	@ 8 1/4
Fresh Tripe, plain	5 1/4	@ 5 1/4
Fresh Tripe, H. C.	7 1/4	@ 7 1/4
Brains	8	@ 8
Kidneys, each	8	@ 8

Veal.

Heavy Carcass, Veal	13 1/4	@ 13 1/4
Light Carcass	14 1/4	@ 14 1/4
Good Carcass	16	@ 16
Good Saddle	18	@ 18
Medium Racks	13 1/4	@ 13 1/4
Good Racks	14	@ 14

Veal Offal.

Brains, each	8	@ 8
Sweetbreads	45	@ 45
Calif Liver	23	@ 23
Heads, each	25	@ 25

Lambs.

Good Caul	15	@ 15
Round Dressed Lambs	16	@ 16
Saddles, Caul	18	@ 18
R. D. Lamb Racks	13	@ 13
Caul Lamb Racks	11	@ 11
R. D. Lamb Saddles	18	@ 18
Lamb Pries, per lb.	18	@ 18
Lamb Tongues, each	4	@ 4
Lamb Kidneys, each	1 1/4	@ 1 1/4

Mutton.

Medium Sheep	11 1/4	@ 11 1/4
Good Sheep	12 1/4	@ 12 1/4
Medium Saddles	13 1/4	@ 13 1/4
Good Saddles	14	@ 14
Good Racks	8 1/4	@ 8 1/4
Medium Racks	9	@ 9
Mutton Legs	15	@ 15
Mutton Loins	10	@ 10
Mutton Steer	8	@ 8
Sheep Tongues, each	2 1/4	@ 2 1/4
Sheep Heads, each	10	@ 10

Fresh Pork, Etc.

Dressed Hogs	13	@ 13 1/4
Pork Loins	14 1/4	@ 14 1/4
Leaf Lard	10	@ 10
Tenderloins	10	@ 10
Spare Ribs	8 1/4	@ 8 1/4
Butts	12 1/4	@ 12 1/4
Hocks	9 1/4	@ 9 1/4
Trimnings	8 1/4	@ 8 1/4
Extra Lean Trimnings	9 1/4	@ 9 1/4
Tails	8 1/4	@ 8 1/4
Snouts	6	@ 6
Pigs' Feet	4	@ 4
Pigs' Heads	6	@ 6
Blade Bones	9	@ 9
Blade Meat	10	@ 10
Check Meat	9	@ 9
Hog Hivers, per lb.	3 1/2	@ 3 1/2
Neck Bones	12	@ 12
Skinless Shoulders	12	@ 12
Pork Hearts	9	@ 9
Pork Kidneys, per lb.	7 1/4	@ 7 1/4
Pork Tongues	14	@ 14
Silp Bones	6	@ 6
Tail Bones	4 1/2	@ 4 1/2
Brains	5 1/4	@ 5 1/4
Backfat	10	@ 10
Hams	15 1/4	@ 15 1/4
Cans	12	@ 12
Bellos	16	@ 16
Shoulders	12	@ 12

SAUSAGE.

Columbia Cloth Bologna	11 1/4	@ 11 1/4
Bologna, large, long, round, in casings	11	@ 11

Choice Bologna	15	@ 15
Frankfurters	13	@ 13
Blood, Liver and Headcheese	11	@ 11
Tongue	14	@ 14
Minced Sausage	13 1/4	@ 13 1/4
Luncheon Sausage, cloth paraffine	17 1/4	@ 17 1/4
New England Sausage	18	@ 18
Compressed Luncheon Sausage	17 1/4	@ 17 1/4
Special Compressed Ham	17 1/4	@ 17 1/4
Berliner Sausage	15	@ 15
Boneless Butts in casings	25	@ 25
Oxford Butts in casings	20	@ 20
Polish Sausage	12 1/4	@ 12 1/4
Garlic Sausage	12 1/4	@ 12 1/4
Country Smoked Sausage	15	@ 15
Farm Sausage	16	@ 16
Pork Sausage, bulk or link	11 1/4	@ 11 1/4
Pork Sausage, short link	12	@ 12
Boneless Pigs' Feet	10	@ 10
Luncheon Roll	16 1/4	@ 16 1/4
Delicatessen Loaf	18	@ 18
Jellied Roll	19	@ 19

Summer Sausage.

Best Summer, H. C. (new)	28	@ 28
German Salsami (new)	25	@ 25
Italian Salsami	27 1/4	@ 27 1/4
Holsteiner	20	@ 20
Mettwurst, New	21 1/4	@ 21 1/4
Farmer	21 1/4	@ 21 1/4

Sausage in Oil.

Smoked Sausage, 1-30	6.50	@ 6.50
Smoked Sausage, 2-20	6.00	@ 6.00
Bologna, 1-50	6.00	@ 6.00
Bologna, 2-20	5.50	@ 5.50
Frankfurt, 1-50	6.50	@ 6.50
Frankfurt, 2-20	6.00	@ 6.00

VINEGAR PICKLED GOODS.

Pickled Pig's Feet, in 200-lb. barrels	11.50	@ 11.50
Pickled Plain Tripe, in 200-lb. barrels	9.00	@ 9.00
Pickled H. C. Tripe, in 200-lb. barrels	12.50	@ 12.50
Pickled Ox Lips, in 200-lb. barrels	—	@ —
Pickled Pigs' Snouts, in 200-lb. barrels	—	@ —
Sheep Tongues, Short Cut, barrels	34.50	@ 34.50

CORNED, BOILED AND ROAST BEEF.

No. 1, 2 doz. to case	22.15	@ 22.15
No. 2, 1 or 2 doz. to case	4 1/2	@ 4 1/2
No. 6, 1 doz. to case	15.00	@ 15.00
No. 14, 1/2 doz. to case	35.00	@ 35.00

EXTRACT OF BEEF.

2-oz. jars, 1 doz. in box	7 1/2	@ 7 1/2
4-oz. jars, 1 doz. in box	7.25	@ 7.25
8-oz. jars, 1/2 doz. in box	14.00	@ 14.00
16-oz. jars, 1/4 doz. in box	24.50	@ 24.50
2, 5 and 10-lb. tins	1.75	@ 1.75 per lb.

BARBELED BEEF AND PORK.

Extra Plate Beef, 200-lb. barrels	17.00	@ 17.00
Plate Beef	17.00	@ 17.00
Prime Meat Beef	17.00	@ 17.00
Extra Meas Beef	17.00	@ 17.00
Beef Hams (220 lbs. to bbl.)	22.00	@ 22.00
Rump Butts	21.00	@ 21.00
Meas Pork, old	19.50	@ 19.50
Clear Fat Racks	24.50	@ 24.50
Family Back Pork	16.00	@ 16.00
Rean Pork	16.00	@ 16.00

LARD.

Pure leaf, kettle rendered, per lb., tes.	12 1/4	@ 12 1/4
Pure lard	11 1/4	@ 11 1/4
Lard substitutes, tes.	9 1/4	@ 9 1/4
Lard, compound	9 1/4	@ 9 1/4
Cooking oil, per gal., in barrels	62	@ 62
Cooks' and bakers' shortening, tubs	11 1/4	@ 11 1/4
Barrels, 1/4 c. over tierces half barrels, 1/4 c. over tierces: tubs and pails, 10 to 80 lbs., 1/4 c. to 1 c. over tierces.	—	@ —

BUTTERINE.

1 to 6, natural color, solids, f. o. b. Chl. cargo	14 1/4	@ 14 1/4
Cartons, rolls or prints, 1 lb.	15 1/4	@ 15 1/4
Cartons, rolls or prints, 2 1/2 lbs.	15	@ 15
Shortenings, 30@60 lb. tubs	11 1/4	@ 11 1/4

DRY SALT MEATS.

(Boxed. Yams are 1/4 c. less.)	13 1/4	@ 13 1/4
Clear Bellies, 14@16 avg.	13 1/4	@ 13 1/4
Clear Bellies, 18@20 avg.	13 1/4	@ 13 1/4
Rib Bellies, 18@20 avg.	9 1/4	@ 9 1/4
Fat Racks, 12@14 avg.	10 1/4	@ 10 1/4
Regular Plates	9 1/4	@ 9 1/4
Clear Plates	9 1/4	@ 9 1/4
Butts	8 1/4	@ 8 1/4
Bacon meats, 1/4 c. to 1 c. more.	—	@ —

WHOLESALE SMOKED MEATS.

Hams, 12 lbs., avg.	17 1/4	@ 17 1/4
Hams, 16 lbs., avg.	17	@ 17
Skinless Hams	18	@ 18
Cans, 4@8 lbs., avg.	13 1/4	@ 13 1/4
Cans, 6@12 lbs., avg.	12 1/4	@ 12 1/4
New York Shoulders, 8@12 lbs., avg.	14	@ 14
Breakfast Bacon, fancy	25	@ 25
Wide, 10@12 avg., and strip, 5@8 avg.	17 1/4	@ 17 1/4
Wide, 6@8 avg., and strip, 3@4 avg.	19 1/4	@ 19 1/4
Rib Bacon, wide, 8@12, strip, 4@6 avg.	28 1/4	@ 28 1/4
Dried Beef Sets	28 1/4	@ 28 1/4
Dried Beef Insoles	29 1/4	@ 29 1/4
Dried Beef Knuckles	27 1/4	@ 27 1/4
Dried Beef Outsoles	27	@ 27
Regular Rolled Hams	25 1/4	@ 25 1/4
Smoked Boiled Hams	19 1/4	@ 19 1/4
Roll-A-Cans	28	@ 28
Cooked Loins Rolls	19	@ 19
Cooked Rolled Shoulder	19	@ 19

SAUSAGE CASINGS.

F. O. B. CHICAGO.

Rounds, per set	22	@ 22
Export Rounds	39	@ 39
Middles, per set	75	@ 75
Beef bungs, per piece	23	@ 23
Beef weasands	7	@ 7
Beef bladders, medium	55	@ 55
Beef bladders, small, per doz.	80	@ 80
Hog casings, free of salt	70	@ 70
Hog middles, per set	11	@ 11
Hog bungs, export	19	@ 19
Hog bungs, large, medium	10	@ 10
Hog bungs, prime	7	@ 7
Hog bungs, narrow	4	@ 4
Imported wide sheep casings	95	@ 95
Imported medium wide sheep casings	80	@ 80
Imported medium sheep casings	70	@ 70
Hog stomachs, per piece	4	@ 4

FERTILIZERS.

Dried blood, per unit	2.80	@ 2.80
Hoof meal, per unit	2.40	@ 2.40
Concentrated tankage	2.35	@ 2.35
Ground tankage, 12%	2.70	@ 2.70 and 10c.
Ground tankage, 11%	2.70	@ 2.70 and 10c.
Ground tankage, 8 and 25%	2.50	@ 2.50 and 10c.
Crushed tankage, 9 and 30%	2.40	@ 2.40 and 10c.
Ground tankage, 6 1/2 and 30%	18.50	@ 18.50 and 19.00
Ground rawbone, per ton	25.00	@ 25.00 and 27.00
Ground steam bone, per ton	21.00	@ 21.00 and 21.50
Unground tankage, per ton less than ground	50c.	@ 50c.

HORNS, HOOFS AND BONES.

Horns, No. 1, 65@70 lbs., aver.	240.00	@ 240.00
Horns, black, per ton	26.00	@ 26.00
Horns, striped, per ton	35.00	@ 35.00
Horns, white, per ton	65.00	@ 65.00
Flat shin bones, 40 lbs. av., per ton	70.00	@ 70.00
Round shin bones, 38-40 lbs. av., per ton	75.00	@ 75.00
Round shin bones, 50-52 lbs. av., per ton	80.00	@ 80.00
Long thigh bones, 90-95 lbs. av., per ton	85.00	@ 85.00
Skulls, jaws and knuckles, per ton	28.00	@ 28.00

LARD.

Prime steam, cash	9.72 1/2	@ 9.72 1/2
Prime steam, loose	9.35	@ 9.35
Leaf	9 1/4	@ 9 1/4
Compound	8 1/4	@ 8 1/4
Neutral lard	10 1/2	@ 10 1/2

STEARINES.

Prime oleo	8 1/4	@ 8 1/4
Oleo, No. 2	8 1/4	@ 8 1/4
Tallow	8	@ 8
Grease, yellow	5 1/4	@ 5 1/4
Grease, A white	6 1/4	@ 6 1/4

OILS.

Lard oil, winter strained, tierces	69	@ 69
Extra lard oil	68	@ 68
Extra No. 1 lard oil	60	@ 60
No. 1 lard oil	55	@ 55
No. 2 lard oil	53	@ 53
Oleo oil, extra	9 1/4	@ 9 1/4
Oleo oil, No. 2	9 1/4	@ 9 1/4
Oleo stock	8 1/4	@ 8 1/4
Neatsfoot oil, pure, bbls.	68	@ 68
Acidless tallow oils, bbls.	62	@ 62
Corn oil, loose	5.70	@ 5.70 and 5.75
Horse oil	6 1/4	@ 6 1/4

TALLOW.

Edible	7	@ 7 1/4
Prime city	7	@ 7 1/4
No. 1 Country	6 1/4	@ 6 1/4
Packers' Prime	6 1/4	@ 6 1/4
Packers' No. 1	6 1/4	@ 6 1/4
Packers' No. 2	5 1/4	@ 5 1/4
Renderers' No. 1	6 1/4	@ 6 1/4

GREASES.

White, choice	6 1/4	@ 6 1/4
White, "A"	6 1/4	@ 6 1/4
White, "B"	6 1/4	@ 6 1/4
Bone	5 1/4	@ 5 1/4
Crackling	5 1/4	@ 5 1/4
House	5 1/4	@ 5 1/4
Yellow	5 1/4	@ 5 1/4
Brown	4 1/4	@ 4 1/4
Glue stock	5 1/4	@ 5 1/4
Garbage grease	4	@ 4
Glycerine, C. P.	20	@ 20
Glycerine, dynamite	19	@ 19
Glycerine, crude soap	13	@ 13
Glycerine, candle	14	@ 14

LIVE STOCK MARKETS

CHICAGO

(Special Letter to The National Provisioner from The National Live Stock Commission Co.)

Union Stock Yards, Chicago, May 27.

Beef steer cattle ruled slow to 10c. lower on the opening day of the week and the receipts totaled 20,546 head. Specialties as usual make their own market and they were fully steady, while the rank and file of the offerings ruled mostly 10c. lower, ceding back to the buying contingent the advance in prices that took place the closing days of last week. Tuesday's run of 2,682 cattle met with the usual Tuesday demand. Wednesday's run of 15,000 cattle made a total of 38,000 for the first three days of the week as compared with 37,000 for the same period a week ago. The specialties, such as prime yearlings, tidy weights and even prime heavy, ruled steady, while other kinds were slow to 10c. lower and we can see no reason at this writing for expecting any decided change in the market during the next week or so. Good to choice steers are selling fully 50c. per cwt. higher than they were at this time a year ago.

Last year it was about the middle of June when Chicago received its first installment of "grassy" cattle and the week following there was a terrific decline of anywhere from 50@75c. per cwt. on "she" stuff as a result of an influx of "grassers," principally from the Southwest section of the country to the river markets. The butcher cattle trade is now beginning to show an easier tendency, which in our estimation will become more pronounced within the next two or three weeks and finally result in a decidedly wider range of values, with the grassy grades selling much lower than they are at present.

The overdue increase in our hog receipts finally arrived and with comparatively light Eastern orders gave packers the long-looked-for opportunity to lower prices here this week. Monday with 54,000 our market closed 20@25c. lower and about 10c. decline was noted again Tuesday, but on Wednesday part of that loss was recovered, making largely a 25@30c. lower market so far this week. The receipts on Wednesday were estimated around 21,000 and the trade opened slow with a few early hogs selling barely steady. The late end of the trade firmed up a little and was more active and about 5c. higher than the low spot, bulk of the hogs selling largely in a range of \$8.10@8.20, top \$8.27½ for some choice lightweights, but comparatively few hogs selling up to and over \$8.20. We look to see a fairly decent run of hogs during the month of June and are of the opinion we will see prices work some lower during that period.

Sheep and lambs have not been quite as favorable for the packers as they had hoped they would be this week, as the runs throughout the country have been quite moderate for the time of year. The market, however, shows no snap, and each day's session is a long, drawn-out and tedious affair. With the advent of more liberal receipts at Southern points the trade at this point will likely suffer in consequence. Spring lambs and light-weight sheep, as well as choice light to medium-weight clipped lambs, are meeting with fair demand, but the half-fat grades and heavy sheep and yearlings are hard to move and will likely continue a "drug on the market." We quote: Good to choice spring lambs, \$9.25@9.75; poor to medium, \$8.50@

9; culls, \$6@7; choice light, clipped lambs, \$8@8.25; heavy and medium-fleshed grades, \$6.50@7.50; culls, \$5.50@6; fat wethers, \$5.50@6; good to choice light ewes, \$5.25@5.50; heavy ewes, \$5@5.20; culls, \$3.50@4.50; bucks, \$4.25@4.50.

ST. LOUIS

(Special Letter to The National Provisioner.)

National Stock Yards, Ill., May 27.

Cattle receipts for the week ending today amounted to approximately 16,300 head, which included approximately 4,100 head on the Quarantine side of the market. Beef steer values are generally 10 to 15c. lower for the week. Quality was fair to good, although prices were lower the trade was generally quite active. The top price was paid on a load of heavy steers at \$8.70, while the bulk of the week's offerings ranged from \$7.85@8.50. On the butcher market cows sold generally 25c. lower for the week. Quality was only fair, and the trade was slow at all times. Several odd head of strictly fancy cows brought as high as \$8, but the bulk of the offerings sold from \$6@7. Heifers sold generally 15 to 25c. lower. A mixed carload of steers and heifers brought \$9, while the bulk of the offerings ranged from \$7.75@8.75. Quality was generally good, and the trading was fairly active. Veal calves at the close of this week are about 50 to 75c. a hundred lower than last week. Best kinds today brought \$9.75, that at the first of the week brought \$10.75. On the quarantine side of the market most of the offerings were made up of Texas grassers, although there were a few loads of Texas fed stuff. The market on all kinds shows no change over last week. Best straight grass cattle brought \$8.40, this for one load, and is the highest price ever paid for grass cattle on this market, and as far as records show, the highest price ever paid for grass cattle shipped out of the State of Texas. Other grass offerings sold from \$7@8.30.

Hog receipts were 56,950 for the week ending today. Prices have experienced a rather severe decline as compared with the close of last week, in fact hogs are selling lower now than they have in weeks past. Last week closed with a top on best hogs of \$8.60, and opened the same way. Values declined steadily until today when best offerings topped at \$8.27½. Order buyers were extremely active and purchased a big proportion of the hogs.

There were approximately 23,200 sheep offered this week. Mutton sheep closed for the week about 25c. lower than the opening, with best kinds selling generally around \$5@5.25. Most of the clipped lambs offered this week sold at \$8 for the best ones, and \$7.25@7.80 for the bulk. At the first of the week there were good offerings of Tennessee spring lambs, these selling generally around \$9.60. The low time on this kind was \$9.50. Today there were no Tennessee lambs offered, but there were some very good offerings from Kentucky which brought \$9.25. Tennessee offerings would bring around \$9.40 today.

KANSAS CITY

(Special Letter to The National Provisioner from The National Live Stock Commission Co.)

Kansas City Stock Yards, May 26, 1914.

Cattle sold readily today at prices that averaged fully steady with the good market of yesterday, when sales were strong to 15 cents above the close of last week. The procession to the scales yesterday and today started early, and business was well over before 10 o'clock each day, showing at least two things, that buyers were anxious for material, and that they did not deem it good

policy to do the usual sparring for time when cattle are taking good fills in order to pump some of the water out of them. Considering the fills put across the scales, prices are 15 to 35 cents above last Tuesday. The Fletcher Kansas yearlings sold at \$9.20 today, 1,070 lbs.; they brought \$9.15 yesterday, 1,119 lbs. Heavy steers reached \$9, mixed yearlings and heifers \$9.10, straight heifers \$8.65. Bulk of the natives sell at \$8 to \$8.75, and some of the discouragement of sellers last week has been converted into moderate satisfaction this week. Some 940 lb. meal fed Texas steers at \$7.75 in the quarantine division went over the scales 15 minutes after the market opening whistle blew, indicating good action in that division. A later train of South Texas grassers sold at \$6.90 to \$7.65 as soon as shaped up and fed. Stock cattle are higher this week than the low close of last week, but are still 10 to 25 cents under 10 days ago, sales largely at \$7 to \$7.75, a few choice cattle at \$8 or a little better.

May and June are proverbially hard months on hog prices, but it was hoped that this year might be an exception, in view of the brave resistance the market has so far shown to repeated attacks. But the outpouring of 56,000 hogs at Chicago yesterday furnished the chance packers needed, and they are pressing their advantage today; market 10 to 15c. lower. Receipts are 17,000 here today, top \$8.10, bulk \$7.95 to \$8.05. A good many hogs are being locked up, in expectation of some reaction tomorrow and later in the week, as opinion is by no means agreed that the packers are in possession of the field. Immune hogs sold to serum makers yesterday 25 cents above top on the general market.

Sheep and lambs sold 10 to 15c. higher today, although spring lambs stopped at \$8.75, same as yesterday. Texas clipped ewes made a new top, at \$8.60, the only representation from Texas today; prime clipped wethers from that section would bring \$6. A good deal of native stock is coming, much mixed in quality, and selling at a rather wide range of prices, ewes as low as \$4.25, and common lambs \$7. Texas goats sell at \$3.75 to \$4.60, brusher goats selling at the record price of \$4.40 yesterday.

SLAUGHTER REPORTS

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending May 23, 1914:

CATTLE.

Chicago	26,162
Kansas City	10,932
Omaha	7,680
St. Joseph	3,354
Cudahy	732
Sioux City	2,218
South St. Paul	3,866
New York and Jersey City	9,057
Fort Worth	8,651
Philadelphia	4,133
Pittsburgh	1,787
Denver	1,918
Oklahoma City	2,678
Cincinnati	2,650

HOGS.

Chicago	91,884
Kansas City	47,050
Omaha	51,257
St. Joseph	42,077
Cudahy	6,015
Sioux City	25,474
Ottumwa	9,300
Cedar Rapids	5,221
South St. Paul	22,997
New York and Jersey City	34,989
Fort Worth	6,284
Philadelphia	4,245
Pittsburgh	7,700
Denver	4,377
Oklahoma City	9,572
Cincinnati	9,528

SHEEP.

Chicago	75,546
Kansas City	30,897
Omaha	21,666
St. Joseph	14,132
Cudahy	651
Sioux City	1,303
South St. Paul	2,774
New York and Jersey City	45,192
Fort Worth	16,549
Philadelphia	12,626
Pittsburgh	4,435
Denver	1,819
Oklahoma City	2,251

THE WEEK'S CLOSING MARKETS

FRIDAY'S GENERAL MARKETS.

Lard in New York.

New York, May 29.—Market quiet. Western steam, \$10.15; Middle West, \$9.70@9.80; city steam, 9½c.; refined, Continent, \$10.40; South American, \$11.05; Brazil, kegs, \$12.05; compound, 8¼@8½c.

Marseilles Oils.

Marseilles, May 29.—Sesame oil, fabrique, — fr.; edible, — fr.; copra oil, fabrique, 87½ fr.; edible, 109 fr.; peanut oil, fabrique, 70 fr.; edible, 90½ fr.

Liverpool Produce Market.

Liverpool, May 29.—(By Cable.)—Beef, extra India mess, 112s. 6d.; pork, prime mess, 105s.; shoulders, square, 54s. 6d.; New York, 50s. 6d.; picnic, 55s.; hams, long, 68s.; American cut, 65s. Bacon, Cumberland cut, 62s. 6d.; long clear, 66s. 6d.; short backs, 63s.; bellies, clear, 64s. Lard, spot prime, 47s. 6d. American refined contract September, 49s. 7½d.; 28-lb. boxes, 48s. 9d. Lard (Hamburg), 50¼ marks. Tallow, prime city, 31s. 9d.; choice, 33s. 9d. Cheese, Canadian finest white new, 64s. Tallow, Australian (at London), 30s. 9d.@33s. 9d.

FRIDAY'S CLOSINGS.

Provisions.

The market was again weak and under pressure with further selling on report of slow spot demand, liquidation on stop orders.

Stearine.

The market continues dull and barely steady with slow demand. Oleo quoted at 8½c.

Tallow.

The market is dull, with prices quoted nominally at 6¼c. for city and 6¾c. for specials.

Cottonseed Oil.

The market was weak and active, with prices at new low levels. Selling by recent buyers, easier crude market, lower lard markets and better reports on the cotton crop than expected, brought considerable pressure on the contract market.

Market closed unchanged to 7 points decline. Sales, 20,900 bbls. Spot oil, \$7.05@7.17. Crude, Southeast, \$6.07@6.13. Closing quotations on futures: June, \$7.13@7.14; July, \$7.17@7.18; August, \$7.29@7.31; September, \$7.38@7.39; October, \$7.20@7.22; November, \$6.85@6.90; December, \$6.78@6.85; January, \$6.70@6.90; good off oil, \$7@7.14; oil, \$6.95@7.12; red off oil, \$6.65@7; winter oil, \$7.40 bid; summer white oil, \$7.30 bid.

FRIDAY'S LIVESTOCK MARKETS.

Chicago, May 29.—Hog market slow and steady. Bulk of prices, \$8.15@8.25; light, \$8.05@8.25; mixed, \$8.05@8.27½; heavy, \$7.80@8.25; rough heavy, \$7.80@7.95; Yorkers, \$8.20@8.25; pigs, \$7.30@8.10; cattle slow and weak; heaves, \$7.40@9.30; cows and heifers, \$3.70@8.75; Texas steers, \$7@8; stockers and feeders, \$6.35@8.30; Western, \$7.10@8.15. Sheep market quiet and steady; native, \$5.25@6.10; Western, \$5.35@6.15; yearling, \$6.10@7.05; lambs, \$6.15@8.15; Western, \$6.40@8.20.

Sioux City, May 29.—Hogs lower, at \$7.95@8.05.

St. Louis, May 29.—Hogs steady, at \$8.10@8.30.

Buffalo, May 29.—Hogs steady; on sale, 5,600, at \$8.60@8.65.

Kansas City, May 29.—Hogs slow, at \$7.95@8.20.

South Omaha, May 29.—Hogs steady at \$7.95@8.05.

St. Joseph, May 29.—Hogs steady, at \$8@8.22½.

Louisville, May 29.—Hogs steady, at \$8.35@8.40.

Indianapolis, May 29.—Hogs steady, at \$8.25@8.30.

PACKERS' PURCHASES

Purchases of livestock by packers at principal centers for the week ending Saturday, May 23, 1914, are reported as follows:

Chicago.

	Cattle.	Hogs.
Armour & Co.	18,600	
Swift & Co.	11,600	
S. & S. Co.	9,900	
Morris & Co.	7,300	
Anglo-American Provision Co.	4,800	
G. H. Hammond Co.	8,300	
Boyd, Lunham & Co.	4,200	
Roberts & Oake,		3,000
hogs; Miller & Hart,		3,000
hogs; Independent		
Packing Co., 6,000		
hogs; Brennan Packing		4,400
Co., 4,400		
hogs; others, 1,400		

Kansas City.

	Cattle.	Hogs.	Sheep.
Armour & Co.	2,533	12,045	3,912
Fowler Packing Co.	223		1,960
S. & S. Co.	1,787	9,484	6,304
Swift & Co.	2,139	9,618	8,374
Cudahy Packing Co.	2,067	7,668	7,460
Morris & Co.	1,937	7,675	2,783
Blount	30	595	
M. Rice	16	407	
Butchers	246	562	104

B. Balling, 77 cattle; Heil Packing Co., 285 hogs; Independent Packing Co., 623 cattle; L. Levy, 23 cattle; John Morrell & Co., 128 cattle; I. Meyer, 148 cattle; Schwartz, Bolen & Co., 888 hogs; E. Storm, 16 cattle; Wolf Packing Co., 55 cattle.

Omaha.

	Cattle.	Hogs.	Sheep.
Morris & Co.	1,202	7,851	2,289
Swift & Co.	2,221	12,516	6,560
Cudahy Packing Co.	3,630	15,090	8,015
Armour & Co.	2,043	15,672	6,768
Swartz & Co.		821	
J. W. Murphy		2,272	
Lincoln Packing Co., 39			
cattle; South Omaha			
Packing Co., 29			
cattle; John Morrell			
& Co., 4			
cattle; Grain			
Belt Co., 36			

St. Louis.

	Cattle.	Hogs.	Sheep.
Morris & Co.	2,111	7,805	6,072
Swift & Co.	1,971	8,685	6,465
Armour & Co.	1,635	10,254	6,426
St. Louis Dressed Beef	306		
Co.			
Independent Packing	1,040		
Co.			
East Side Packing	148	2,645	
Co.			
Beiz Packing Co.		1,087	
Heil Packing Co.		707	
Krey Packing Co.		1,533	
Carondelet Packing	6	595	28
Co.			
Sartorius Provision		528	
Co.			
Others	1,398	21,277	2,071

St. Joseph.

	Cattle.	Hogs.	Sheep.
Swift & Co.	1,750	10,558	10,596
G. H. Hammond Co.	928	10,068	3,027
Morris & Co.	929	9,512	2,009

Sioux City.

	Cattle.	Hogs.	Sheep.
Cudahy Packing Co.	1,271	12,354	
Armour & Co.	973	12,331	
Swift & Co.		5,057	

Roth Packing Co., 121 hogs; R. Hurn Packing Co., 194 cattle; Omaha Packing Co., 606 hogs; Sacks Bros., 77 cattle; J. L. Brennan & Co., 56 cattle; Dubuque Packing Co., 135 hogs; Des Moines Packing Co., 64 cattle; Statter & Co., 68 cattle; others, 2,993 cattle.

NEW YORK LIVE STOCK

WEEKLY RECEIPTS TO MAY 25, 1914.

	Beeves.	Calves.	Sheep and lambs.	Hogs.
New York	1,699	8,843	4,536	6,273
Jersey City	3,275	4,304	25,123	23,796
Central Union	2,270	762	11,528	
Lehigh Valley	1,813	315	4,005	
Scattering		146		4,920
Totals	9,057	14,370	45,192	34,989
Totals last week	11,143	14,043	33,030	31,360

ARGENTINE BEEF EXPORTS.

Cable reports of Argentine exports of beef for the week up to May 22, 1914, show that exports from that country were as follows: To Europe, 87,275 quarters; to North America, 16,769 quarters.

Cable reports for the week up to May 29, 1914, show these exports: To Europe, 146,415 quarters; to North America, 6,923 quarters.

RECEIPTS AT CENTERS

SATURDAY, MAY 23, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	200	12,000	3,000
Kansas City	200	1,000	3,000
Omaha	1,700	8,000	100
St. Louis	350	5,000	650
St. Joseph		3,000	
Sioux City	100	5,000	500
St. Paul	350	3,000	50
Okla. City		200	
Fort Worth	300	600	2,000
Milwaukee	25	1,248	
Denver		100	
Louisville		1,260	
Detroit		200	
Cudaby		200	
Indianapolis	250	3,000	1,000
Pittsburgh		4,000	
Cincinnati		965	
Buffalo	100	3,000	2,000
Cleveland	100	1,000	1,000
New York	192	2,050	1,559

MONDAY, MAY 25, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	21,000	56,000	24,000
Kansas City	6,000	9,000	11,000
Omaha	3,700	6,000	4,500
St. Louis	4,400	7,000	6,700
St. Joseph	1,200	4,000	2,500
Sioux City	2,500	7,000	
St. Paul	1,700	7,000	50
Okla. City	1,300	1,500	
Fort Worth	2,500	1,000	1,500
Milwaukee		781	
Denver	1,300	700	
Louisville		2,900	
Wichita		301	
Indianapolis	700	2,000	
Pittsburgh	1,600	10,000	6,800
Cincinnati		4,331	
Buffalo	1,800	16,800	9,400
Cleveland	440	4,000	4,400
New York	2,768	8,078	10,588

TUESDAY, MAY 26, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	2,500	15,000	10,000
Kansas City	7,000	17,000	10,000
Omaha	4,800	11,000	4,000
St. Louis	5,800	13,000	5,000
St. Joseph	1,200	9,000	2,400
Sioux City	900	5,000	
St. Paul	1,500	7,000	100
Okla. City	400	1,300	
Fort Worth	3,700	700	2,500
Milwaukee	300	2,393	100
Denver	200	2,000	100
Louisville		476	
Detroit		200	
Cudaby		2,000	
Wichita		2,073	
Indianapolis	1,500	10,000	
Pittsburgh		4,000	1,000
Cincinnati		2,779	
Buffalo	25	1,300	1,400
Cleveland	20	2,000	
New York	410	3,418	4,410

WEDNESDAY, MAY 27, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	15,000	21,000	20,000
Kansas City	3,300	8,000	9,000
Omaha	2,400	11,000	3,000
St. Louis	2,000	10,500	8,000
St. Joseph	1,200	4,200	500
Sioux City	1,000	7,200	500
St. Paul	1,200	6,000	100
Okla. City	1,200	1,300	1,000
Fort Worth	1,200	6,100	100
Milwaukee	100	7,683	
Denver	1,000	300	
Louisville		1,470	
Detroit		2,000	
Wichita		1,406	
Indianapolis	1,400	6,000	
Pittsburgh		2,500	1,000
Cincinnati	600	1,965	1,600
Buffalo	35	2,500	2,800
Cleveland	40	12,000	800
New York	2,005	4,865	6,024

THURSDAY, MAY 28, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	4,500	15,000	12,000
Kansas City	1,500	4,000	5,000
Omaha		11,000	
St. Louis	2,600	7,900	4,600
St. Joseph		6,000	
Sioux City		6,000	
St. Paul		3,000	
Milwaukee		4,310	
Louisville		2,170	
Detroit		4,000	
Cudaby		600	
Wichita		2,938	
Indianapolis		7,000	
Buffalo	50	2,000	5,000
Cincinnati	600	2,900	1,600
Cleveland		1,000	
New York	1,269	2,518	8,417

FRIDAY, MAY 29, 1914.

	Cattle.	Hogs.	Sheep.
Chicago	1,000	12,000	5,000
Kansas City	200	3,000	
Omaha	300	11,000	200
St. Louis	550	6,000	2,500
St. Joseph	200	3,500	500
Sioux City	300	8,000	500
Fort Worth	3,300	1,200	3,500
South St. Paul	1,200	7,200	300
Okla. City	500	1,200	

Retail Section

CLEAN BUTCHER SHOPS.

The necessity for perfect sanitation in the butcher shop during the summer months cannot be over estimated. This applies as much from a financial as from a health standpoint.

The old-fashioned dingy shop with its evil odors, exposed meats, greasy and bloody wooden benches, fly-covered blocks and sanded floor, is scarcely ever to be seen nowadays. The retail butcher has learned that the purchasing public has been educated in sanitation in the butcher shop, and that even the school children are now taught that cleanli-

ness is as important as any other branch of learning. And so it pays the butcher to keep a clean shop. It pays to keep his meat under cover, not alone to keep the flies and dust from it, but to prevent promiscuous handling, which is almost as bad.

While marble counters and glass showcases cost more than a plain marble bench the increased patronage that comes to the clean, up-to-date market amply repays the additional expenditure. This is true no matter where the market is located, in city, town, or country place, as 99 per cent. of a butcher's customers are women. They are

quick to observe cleanliness, and invariably give the preference to the clean, well-kept shop, and advise their friends to do likewise. It pays to keep clean. And in hot weather this is doubly true.

LOCAL AND PERSONAL.

L. De Vries has purchased J. P. Smith's meat market at Garwin, Ia.

M. Schuler, founder of the M. Schuler Beef Company at Washington, D. C., died at his home last week.

H. H. Fadden will engage in the meat business at Claremont, N. H.

M. Syrias has opened a new market at Marlboro, N. H.

A. L. Bailey has sold his meat market at Tilton, N. H., to Caverly & Wiggan.

The Third Avenue Beef Company, 2337 Third avenue, New York, N. Y., has been damaged by fire.

L. G. Derick has purchased C. C. Holmes' meat market at Northfield, Vt.

B. Crosby has closed his meat market at Ipswich, Mass., for the summer.

M. J. Clancy & Brother have opened a new meat market at Asbury Park, N. J.

W. F. Harney, dealer in provisions at Boston, Mass., has made an assignment to J. M. McInerney.

R. H. Sidell has purchased the city meat market at Litchfield, Mass.

C. T. Eggert and A. Bethcome will engage in the meat business at Fargo, N. D.

G. H. Rollins has engaged in the meat business at Franklin Falls, N. H.

The Cunningham Supply Company's provision market at Boston, Mass., has been damaged by fire.

J. Tatman has sold his meat market at Greene City, Mo., to O. E. Kidwell.

H. E. Young has purchased M. L. Compton's meat market at Metz, Mo.

Burke Brothers' provision store at Massabesic Lake, N. H., has been destroyed by fire.

J. T. Giesy has purchased the Frank Reynolds meat market at 505 North Main street, Ottawa, Kan.

W. M. Winters has purchased the City Meat Market at Dexter, Kan., from P. J. Swartz.

The Martin & Company Cash Grocery, Emporia, Kan., is about to add a meat market.

Charles McMillen, of Oakville, Kan., has engaged in the meat business at Lost Springs, Kan.

Ray & Burton have opened at Wagoner, Okla., under the name of The Palace Meat Market.

Jackson & Floyd have opened a meat market at Sedan, Kan.

O. & E. A. Alcorn and T. B. Huffman have succeeded to the business of the Ionia Meat Market at Ionia, Kan.

Frank Pate has purchased the interest of Fred Eafles in the Pioneer Meat Market at Sterling, Kan.

The Hamilton Meat Market has been moved to the Lonnecker store at Bartlett, Kan.

C. B. Long is making arrangements to reopen the City Meat Market at Vollmer, Ida.

Jack Porter, of Fairbury, has engaged in the meat business at Belleville, Kan.

P. J. Lorenze has closed out his meat business at Fremont, Neb.

James Patedil has sold out his meat business at Dodge, Neb.

Bothe & Dempsey have succeeded John Bothe in the meat business at Hart, Mich.

Edward Brudy has re-engaged in the meat business at Kingsley, Mich.



A BUTCHER SHOP IN SINGAPORE.

In spite of the fact that Singapore, Straits Settlements, is less than one hundred miles north of the Equator, and has a hot, humid climate, fresh meat is hung in the public streets without even the protection of a screen to keep off the innumerable insects.

Shortly after the animals are slaughtered and cut up, the meat is offered for sale in these open stalls. It is only purchased in small quantities, because it rots if kept for more than a few hours without ice, and ice is scarce. There is a considerable white population in Singapore, English and European, and until recently most of them have had to buy their meats under such conditions as these.

YORK ICE MACHINE SALES.

(Concluded from page 21.)

also a 10-ton flooded freezing and distilling system.

T. F. Maffett, Leesburg, Va.; one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to slide valve engine and condensing side complete, also a 10-ton flooded freezing system and 10-ton distilling system, also one 50 h. p. horizontal return tubular boiler system.

Albany Medical College, Albany, N. Y.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Napoleon Favreau, Cohoes, N. Y.; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

O. B. Cintas, Havana, Cuba; one 4-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

Franchini & Halk, 458 Pearl street, New York, N. Y.; one 6-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

James Stephens & Sons, Albany, N. Y.; one 11-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

The Sanitary Ice Cream Company, Altona, Pa.; one 17-ton vertical single-acting, belt-driven, enclosed type refrigerating machine and high-pressure side complete.

The Aiken Ice Company, Aiken, S. C.; one 25-ton ice-making absorption compression side complete, and one 25-ton flooded freezing system. This installation was made in Warrenville, S. C.

Milton Store, Inc., St. Paul, Minn.; one 25-ton horizontal double-acting, belt-driven refrigerating machine and condensing side complete; one horizontal shell-and-tube brine cooler, brine supply tank, two centrifugal brine pumps; 2,000 feet of 1 1/4-inch brine piping for storage rooms; 1,950 feet of 1 1/4-inch direct expansion piping for ice cream hardening and anterooms.

Oriental Oil Company, Dallas, Tex.; one 10-ton absorption compression side complete, also one shell-and-tube brine cooler of 15 tons capacity. This installation was made in Oriental, Tex.

Geo. S. Monser & Company, Wenona, Ill.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Samuel Alboum, Newark, N. J.; one 35-ton vertical single-acting refrigerating machine, direct connected to Corliss engine, and condensing side complete, also one drinking water supply tank 16 feet long, 4 feet wide, 4 feet high, containing 1,120 feet of 2-inch piping.

J. T. Milliken, Crescent, Mo.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Peerless Ice Cream Company, Winston-Salem, N. C.; one 11-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete, also one 4-ton freezing system, and 550 feet of 2-inch direct expansion piping for ice cream hardening room and milk storage.

Pappas & Company, 164 Delancey street, New York, N. Y.; one 8-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

American Druggists' Syndicate, Long Island City, N. Y.; one 8-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

A. E. Bent, Denver, Col.; one 20-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete, also a 10-ton flooded freezing and distilling system. This installation was made in Eldorado Spring, Mo.

Crystal Ice Company of Canton, Canton, Mo.; one 35-ton vertical single-acting refrigerating machine, direct connected to Corliss engine, and condensing side complete, including two flooded atmospheric ammonia condensers; a 1 7/8-ton flooded freezing and

distilling system and one 80-h. p. horizontal return tubular boiler system.

Westerberg & William, New York, N. Y.; one 20-ton vertical single-acting refrigerating machine, direct connected to slide valve engine, and high-pressure side complete. This installation was made for the New York Telephone Company in the Walker Lisenard Telephone building, New York, N. Y.

Jermyn Hotel, Scranton, Pa.; one 12-ton vertical single-acting enclosed type refrigerating machine, direct connected to slide valve engine, and compression side complete.

Fletcher Land Company, Providence, R. I.; one 15-ton horizontal double-acting refrigerating machine, direct connected to Corliss engine, and condensing side complete, including one flooded double pipe ammonia condenser, also one 4-ton freezing system complete. This installation was made in the Narragansett Hotel, Providence, R. I.

Central Illinois Public Service Company, Tolono, Ill.; one 12-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Moultrie Ice and Cold Storage Company, Moultrie, Ga.; a 15-ton flooded freezing system complete.

Alabama Storage and Ice Company, Montgomery, Ala.; one 12-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

E. Hover, Bellefontaine, Ohio; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Minnesota State Prison, Stillwater, Minn.; one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high-pressure side complete.

Tupelo Oil and Ice Company, Tupelo, Miss.; one 50-ton horizontal double-acting belt-driven refrigerating machine and condensing side, complete, also a 20-ton freezing system complete.

Joseph Baum, Kansas City, Kan.; one 12-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete, also 2,680 feet of 1 1/4-inch direct expansion piping and congealing tanks for storage rooms.

R. T. Ford Company, Rochester, N. Y.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete. This installation was made in the Arnold Park Apartments.

Nathan Harris, Rochester, N. Y.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete. This installation was made in the Alexandria Street Apartments.

Ayanoff Machinery and Tool Company, Mansfield, Ohio; two 2-ton vertical single-acting belt-driven enclosed type refrigerating machines and high-pressure sides complete.

The Fishel Company, Pittsburgh, Pa.; one 4-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Swanstrom Bros. Mill Company, Foley, Ala.; one 12-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete. This installation was made by Mr. Chas. F. Rantz of New Orleans, La.

F. G. Benner, Erie, Pa.; one 20-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete, also one 2-inch and 3-inch double pipe brine cooler, 12 pipes high and 17 feet long.

Holy Ghost Hospital, Cambridge, Mass.; one 3-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Despatch Heat, Light and Power Company, East Rochester, N. Y.; one half-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Edwin M. Miller, Lebanon, Pa.; one 2-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Albert Emanuel, Vernon, Tex.; two double pipe ammonia condensers, 12 pipes high, 18

feet long; 60 300-pound ice cans; 720 feet of 1 1/4-inch direct expansion piping for ice storage, and various other miscellaneous material.

Famous Mineral Wells Water Company, Mineral Wells, Tex.; one 1-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

J. E. & F. W. Koontz, Hagerstown, Md.; one 2-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Fred Thalman, New York, N. Y.; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

Merchants' Despatch & Transportation Company, East Rochester, N. Y.; one 12-ton vertical single-acting enclosed type refrigerating machine, direct connected to slide valve engine, and high-pressure side complete.

L. P. Wilson, Hyannis, Mass.; one 6-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

H. J. Hannaway & Company, Norristown, Pa.; one 8-ton vertical single-acting belt-driven enclosed type refrigerating machine and high-pressure side complete.

C. S. Hendrickson Ice Cream Company, Babylon, L. I., N. Y.; one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to slide valve engine, and high-pressure side complete.

Weimer Ice and Cold Storage Company, Weimer, Tex.; two "Shipley" atmospheric ammonia condensers, each 20 feet long, 12 pipes high, made of 2-inch pipe.

Florence Ice Company, Florence, S. C.; three double pipe exchangers, two double pipe weak aqua coolers and one double pipe distilled water cooler.

New United States Naval Hospital, Kittery, Me.; one quarter-ton freezing system.

Brighton Cold Storage Company, Rochester, N. Y.; four coils of "Shipley" atmospheric ammonia condensers, each 20 feet long, 12 pipes high, made of 2-inch pipe.

Leroy Cold Storage and Produce Company, Leroy, N. Y.; two "Shipley" atmospheric ammonia condensers, each 20 feet long, 12 pipes high, made of 2-inch pipe.

Tiptonville Ice and Water Company, Tiptonville, Tenn.; a 3-ton freezing system.

Wegner Machine Company, Buffalo, N. Y.; 3,000 feet of 2-inch full weight Byers wrought iron pipe, six double pipe counter-current ammonia condensers, ammonia receiver, accumulator, dump, agitator, framework and piping for freezing tank. This apparatus was installed for the Medina Cold Storage Company, Medina, N. Y.

Swift & Company, Union Stock Yards, Chicago, Ill.; a 150-ton shell-and-tube brine cooler.

Ebner Ice and Cold Storage Company, Vincennes, Ind.; the necessary material for changing their original freezing tank to the flooded system.

Southern Ice Company, Columbus, Ga.; four "Shipley" atmospheric ammonia condensers, each 20 feet long, 14 pipes high, made of 2-inch pipe.

Metzler Bros. Brewing Company, Brooklyn, N. Y.; one "Shipley" atmospheric ammonia condenser, 20 feet long, 12 pipes high, made of 2-inch pipe.

Breyer Ice Cream Company, Philadelphia, Pa.; 1,650 feet of 2-inch full weight wrought iron pipe.

United States Engineers' Office, Vicksburg, Miss.; a 400-pound freezing system, also ammonia condenser, receiver and oil separator. This apparatus will be installed on board the snag boat "Ransdell."

The York Company has also completed shipment of its contract with the Empresa De Armazens Frigorificos, Rio De Janeiro, Brazil, S. A., which included the following: Four 300-ton horizontal double-acting belt-driven duplex refrigerating machines, with 48 flooded type atmospheric ammonia condensers and the balance of the condensing side complete, also one 200-ton raw water flooded freezing system, using cans of 60 pounds capacity.

New York Section

G. F. Swift, Jr., was in New York during the week.

W. F. Pratt and F. G. McGrill of the local S. & S. Company staff, returned this week from a visit to Chicago.

The Brooklyn Branch, United Master Butchers of America, held their annual outing last Sunday at Harmony Park, Staten Island. There was a big crowd.

W. F. Colladay, of the Sulzberger & Sons Company staff at Chicago, who has been abroad for three months, was in New York this week on his return to the West.

Mrs. Edward Morris, widow of the late head of the Morris house, and Edward Morris, Jr., arrived in New York this week on the Olympic after a short trip abroad.

Swift & Company's sales of beef in New York City for the week ending May 16, 1914, averaged as follows: Domestic beef, 12.71 cents; imported beef, 10.98 cents per pound.

Philip Meyer, a retired wholesale meat and provision dealer, aged 78 years, was struck by a surface car at Third avenue and Seventy-third street, and died shortly afterward in a nearby hospital.

John Boyle, assistant to Charles S. Hall, manager of the Swift interests in London, was in New York this week, accompanied by Mrs. Boyle, en route to Chicago. They are on a pleasure trip to the United States.

F. A. Fowler, of Chicago, head of the Swift branch house department, Charles Simons, district manager at Boston, and W. J. Russell, Jr., of the branch house executive staff at Chicago, were in New York last week.

Friends in the trade are congratulating I. Cahn, the well-known butcher and packer of No. 456 Ninth avenue, on his added responsibilities, brought about by the arrival of a big boy at his house during the past week. Since becoming a happy daddy Mr. Cahn realizes more than ever that the world sure do move.

The South Brooklyn Branch, United Master Butchers of America, has elected the following officers for the ensuing year: President, Henry Himstedt; vice-president, Edward Karl; financial secretary, David Dyer; corresponding secretary, Chas. Fraedrich; treasurer, David Wolf; sergeant at arms, Edward J. Lies; trustee, Sam. Heyman.

Louis Frank of Eighth avenue is perfectly willing to co-operate with feminine or any other kind of social uplifters in their pursuit of knowledge, and in educating the masses on how to buy meat. This is indeed a most worthy cause, and much credit is due Mr. Frank for his willingness to give part of his valuable time to this most estimable object.

The following is a report of the number of pounds of meat, fish, poultry and game

seized and destroyed in the city of New York during the week ending Saturday, May 23, 1914: Meat.—Manhattan, 1,680 lbs.; Brooklyn, 20,027 lbs.; the Bronx, 38 lbs.; Queens, 15 lbs.; total, 21,760 lbs. Fish.—Manhattan, 633,880 lbs.; Brooklyn, 600 lbs.; the Bronx, 100 lbs.; total, 634,580 lbs. Poultry and game.—Manhattan, 4,359 lbs.

The annual outing of the employees of Swift & Company in the New York territory will be held on Saturday, June 20, at Bellwood Park, N. J., which is near Easton, Pa. It will be in the nature of a basket picnic, and three special trains will be required to carry the crowds, made up exclusively of Swift employees and their families. A baseball game between New York and New Jersey employees will be a feature of the athletic programme.

Hugo Wild, of the Hugo Wild Casing Company, of Montreal, the Toronto Butchers' Supply Company, Boston Casing Company, and Liverpool (England) Casing Company, sails on June 6 for a three months' European trip. Mr. Wild is probably as well known in England among the trade as he is in New York and Canada. The pressure of his heavy business interests have made it necessary for him to slow down a bit in the hard work that keeps him hustling nine months in the year.

A HOG CHOLERA SUGGESTION.

At a time when hog cholera is a topic of vital interest, not only to hog raisers, but to meat packers and to meat consumers, any suggestion in the line of a remedy is worth considering. Hog cholera cures are coming on the market, and the government only this week issues a warning against one "quack" remedy which has already deluded farmers.

The following letter from a well-known food expert offers a suggestion which may develop some value if taken up and tried. He says:

New York, May 23, 1914.

Editor The National Provisioner:
I was deeply interested in reading in your May 2 issue an account of the enormous meat losses through disease, which is estimated at \$150,000,000 for the year 1913. It seems that, if hygienic precautions were enforced on all raisers of cattle, hogs and sheep, this enormous loss would be greatly reduced.

If in a few years science could convert a pest hole in the Canal Zone into a health resort, the same could be done throughout the United States in reference to livestock. When a human being has tuberculosis, pneumonia or other diseases of the lungs, fresh air is considered of vital importance. A farmer should realize the value of fresh air in his stables and the value of fly screens. Stables should be drained so as to prevent mud, moisture and dampness.

Hogs are not naturally filthy; but when they are placed in pens from which they cannot escape, they are compelled to live in their own filth. If there is no shade, they are compelled to lie in mud to cool themselves.

When I was a young man we raised hogs by allowing them to run in the woods, where

it was "root, hog or die," and they would root in the ground for worms, etc., and eat nuts that had fallen from the trees. When corn was ripe they were put into a field where there were large straw stacks. They would burrow around the straw stacks, and break up and pull out straw until they had a nice clean bed to lie in. Four or five would lie together and sleep "as warm as bugs in a rug" in the winter time. There was never any slush or mud for them to lie in. They had all the corn they could eat and there was no sickness among them.

If similar conditions were followed by hog and cattle raisers today, the health of livestock would certainly improve.

Years ago when I was traveling through Kansas there was an epidemic of hog cholera. I was informed by the farmer that he sprinkled borax in the food, and that it benefited the hogs that partook of this prepared food.

I have never heard of any experiments similar to the above being conducted, but it is a simple proposition and it could readily be determined whether mixing borax with the food is of any value or not. There should be something done to prevent such enormous losses, as such losses unquestionably add materially to the cost of living.

Yours very truly,

H. L. HARRIS.

WHAT FARMER GOT FOR PRODUCE.

The crop reports of the Bureau of Statistics of the U. S. Department of Agriculture show the average prices paid to the farmers in various States for butter, eggs, and chickens on May 1, 1914, and as compared with the similar estimates on May 1, 1913. Apparently farmers are obtaining on an average less for their butter and slightly more for their eggs and chickens.

The average price paid to the farmer for butter on May 1, 1914, was 23.8c. or 3.2c. less a pound than the average price paid on May 1, 1913. In the New England States, farmers of New Hampshire seem to have received on an average 33c. or 1c. more a pound, while in Connecticut they were paid 30c. or 8c. less a pound; in Vermont 29c. and Rhode Island 32c. or 6c. less a pound; and in Massachusetts 33c. or 3c. less a pound and in Maine 30c. or 1c. less. In New York and Pennsylvania, and adjoining States, the average price was 28c. to 32c. or from 7c. to 4c. less. On the coast from Maryland to South Carolina the prices were either the same or 1c. higher, ranging from 25c. to 28c. Georgia farmers receiving 26c. seem to have gained 1c., while the Florida farmers received 2c. a pound less or 33 cents. In the balance of the States, with a few exceptions where the price was stable, farmers apparently were receiving from 1c. to 5c. less a pound, except that in Montana the price was 1c. more, in Arizona 6c. less and in Oregon 7c. less.

The farm prices for eggs on May 1 were 16.8c. a dozen or about .7c. higher on an average for the country than on May 1, 1913, or an increase of about 4.3 per cent. In most of the States the price was the same, or varied only by 1c. one way or the other. In Montana, however, eggs on May 1, 1914, were 18c. or 4c. cheaper than the preceding year, while in New Mexico they were 23c. or 4c. higher on an average.

DAVID MAYER,

WHOLESALE COMMISSION DEALER IN
ARGENTINE, AUSTRALIAN AND DOMESTIC

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